CHRYSLER

Regulatory Affairs

August 26, 2008

Denise Ratliff, Enforcement Specialist
U.S. Environmental Protection Agency
Remedial Enforcement Support Section
77 W. Jackson SR-6J
Chicago, IL 60604

Re: Request for Information Pursuant to Section 104(e) of CERCLA for Behr Dayton Thermal Systems VOC Plume in Dayton, Ohio

Dear Ms. Ratliff:

This correspondence and its enclosure are provided in further response to U.S. EPA's May 29, 2008, 104(e) Information Request to Chrysler LLC related to the Behr Dayton Thermal Site.

Sincerely,

Gregory M. Rose
Senior Manager
Assessment, Deactivation & Remediation

Dayton Thermal Products Plant

Index of Chrysler's Responsive Documents to USEPA Request for Information 07/15/08

Item No.	USEPA Request No.	Date of Document	Type of Document	Title/Description of Document
1	7C,E,F/15A,E	Sep 1999	Map	Historical Source Area Map
2	14	06/03/96	Drawing	Plot and Sewer Plan
3	14	May 1998	Map	Utility Map from 1967 Industrial Waste Study
4	14	10/26/99	Drawing	DiamlerChrysler-Dayton Thermal Products Facility Schematic
5	14	Feb 2002	Map	Buried Utilities
~~6~~	18	07/27/98	Permit Exemption	Permit to Install Exemption of SVE System
~~7~~	18	03/25/99	Permit	Off-site Permit Right-of-Way Borings
8	18	06/12/03	Permit	Permit to Drill and Permit to Operate Class V Injection Wells
9	18	04/08/04	Permit	Permit to Install Groundwater System 2785
10	18	06/02/04	Permit	NPDES Permit IN
11	18	03/20/08	Permit	Dayton Injection Permit
12	21	08/16/91	Report	Status Report and Recommendations Environmental Site Assessment
13	21	02/02/94	Report	Site Assessment Summary
14	21	09/14/95	Report	Final Site Investigation Report, Volume I of III
15	21	09/14/95	Report	Final Site Investigation Report, Volume II of III
16	21	Dec 1998	Map	Groundwater Quality Maps
17	21	Apr 1999	Report	Off-site Geoprobe Investigation: Groundwater Sampling Analytical Results
18	21	May 1999	Map	Cross-Section Location Map
19	21	May 1999	Map	TCE Isoconcentration Contours Along Geologic Cross-Sections I-I, J-J & K-K
20	21	May 1999	Map	CIS-1, 2-DCE Isoconcentration Contours Along Geologic Cross-Sections E-E & F-F
21	21	May 1999	Map	CIS-1, 2-DCE Isoconcentration Contours Along Geologic Cross-Sections G-G & H-H
22	21	May 1999	Map	Vinyl Chloride Plume Isoconcentration Contours Along Geologic Cross-Sections I-I & L-L
23	21	May 1999	Map	CIS-1, 2-DCE Isoconcentration Contours Along Geologic Cross-Sections I-I, J-J & K-K
24	21	May 1999	Map	TCE Concentrations (ug/L) in Intermediate Groundwater
25	21	07/23/99	Memorandum	Free-Phase Product Recovery and Collection
26	21	10/01/99	Report	Soil Pile Investigation Report
27	21	Jun 2000	Map	Property Owners Mailing Addresses & Phone Nos. for Proposed Off-site Nested Well Locations
28	21	11/14/00	Memorandum	SVE Soil Sampling Analytical Results
29	21	01/01/01	Work Plan	Off-site Drilling Investigation Work Plan
30	21	Nov 2001	Map	TCE Concentrations in Shallow Groundwater July 2001
31	21	Nov 2001	Map	TCE Concentrations in Intermediate Groundwater July 2001
32	21	Nov 2001	Map	TCE Concentrations in Deep Groundwater July 2001
33	21	Nov 2001	Map	DCE Concentrations in Shallow Groundwater July 2001
34	21	Nov 2001	Map	DCE Concentrations in Intermediate Groundwater July 2001
35	21	Nov 2001	Map	DCE Concentrations in Deep Groundwater July 2001

Dayton Thermal Products Plant

Index of Chrysler's Responsive Documents to USEPA Request for Information 07/15/08

Item No.	USEPA Request No.	Date of Document	Type of Document	Title/Description of Document
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37	21	Nov 2001	Map	PCE Concentrations in Intermediate Groundwater July 2001
38	21	Nov 2001	Map	PCE Concentrations in Deep Groundwater July 2001
39	21	Nov 2001	Map	Surrounding Area
40	21	Nov 2001	Map	TCE Concentration in Groundwater Cross-Sections A-A, B-B, C-C, July 2001
41	21	Nov 2001	Map	TCE Concentration in Groundwater Cross-Sections D-D, E-E, F-F, July 2001
42	21	Nov 2001	Map	TCE Concentration in Groundwater Cross-Sections G-G, H-H, I-I, J-J, July 2001
43	21	2003	Map	TCE Concentration (Sampling Results 2003)
44	21	2003	Map	TCE Concentration (Sampling Results 2003)
45	21	2003	Map	TCE Concentration (Sampling Results 2003)
46	21	2003	Map	Vinyl Chloride Plume (Sampling Results 2003)
47	21	Unknown	Photo	Aerial Photo of AirTemp Dayton Plant
48	21/21B	1951-81	Report	Off-site Wells: Well Logs and Drilling Reports
49	21/21B	03/16/98	Log	Water Supply Well Log
50	21/21B	11/12/01	Report	Off-site Groundwater Investigation Results, Sep 97 - Sep 01
51	21/21B	2003-04	Report	Well Logs and Drilling Reports
52	21/21B/21G	02/12/02	Memorandum	Soil Investigation Outside North End of Building 40
53	21/21C/21G	Nov 2001	Map	TCE Cross Section G-G, H-H, I-I, & J-J July 2001
54	21/21C/21G	Nov 2001	Map	TCE Cross Section A-A, B-B, & C-C July 2001
55	21/21C/21G	Nov 2001	Map	TCE Cross Section D-D, E-E, & F-F July 2001
56	21/21C/21G	06/10/04	Map	PCE Isocontours November 2003
57	21/21C/21G	Nov 2004	Map	July 2004 Groundwater Contours - System Off
58	21/21C/21G	Dec 2005	Map	November 2003 Groundwater Contours - Gem City Running
59	21/21C/21G	Dec 2005	Map	November 2005 Groundwater Contours - System Running
60	21/21C/21G	Dec 2005	Map	November 2005 Groundwater Contours - System Running
61	21/21C/21G	Aug 2007	Map	Shallow TCE Concentrations
62	21/21C/21G	Aug 2007	Map	Shallow TCA Concentrations
63	21/21C/21G	Aug 2007	Map	Groundwater Contours & Flow Path
64	21/21C/21G	Aug 2007	Map	Groundwater Contours & Proposed Wells, July 18, 2007
65	21/21C/21G	Sep 2007	Map	Boundary Shallow TCE Concentrations w/Groundwater Contours and Flow
66	21/21C/21G	Sep 2007	Map	Groundwater Contours w/Potential Source Area
67	21/21G	09/04/98	Correspondence	LBG Ltr to DCC Re Building 40B SVE System Start-up
68	21/21G	06/04/01	Memorandum	Building 50 SVE Pilot Tests Results
69	21/21G	02/12/02	Memorandum	Building 50 SVE System Installation
70	21/21G	06/01/02	Report	Evaluation Memo: Building 40B SVE System

Dayton Thermal Products Plant

Index of Chrysler's Responsive Documents to USEPA Request for Information 07/15/08

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71	21/21G	06/26/02	Memorandum	Aquifer Testing
72	21/21G	03/04/03	Report	Technical Memo: Soil and Groundwater Remediation Summary
73	21/21G	04/10/03	Correspondence	Dayton City Ltr to DCC Re Groundwater Off-site Migration
74	21/21G	08/11/03	Correspondence	DCC Ltr Re Completion of Pump Test on Extraction Well No. 6 and Supporting Data
75	21/21G	07/15/04	Report	Technical Memo: 2nd Quarter 2004 Status Report: North and South SVE System
76	21/21G	08/31/04	Report	Technical Memo: Monthly Status Report: North and South SVE System - July 2004
77	21E	01/24/03	Correspondence	LJB Ltr to Behr Re Risk Evaluation of Disposal Options VAP-Approved Soil
78	21F	Jan 2008	Map	Mitigation Property Locations
79	21G	07/03/02	Report	Technical Memo: Assessment of Potential for Enhancing Natural Attenuation Processes
80	21G	03/04/03	Permit Application	Application for Permit to Drill (Construct and Install)
81	21G	03/13/03	Permit Application	Application for UIC Permit
82	21G	05/10/05	Correspondence	DCC Ltr to Behr Re NPDES Discharge Limit Exceedance
83	21G	05/11/05	Correspondence	Behr Ltr to OEPA Re Followup to Report No. 05 05-57-2083, NPDES
84	21G	2008	Reports	Injection Monitoring Reports
85	26	2001	Report	Waste Characterization Reports
86	26	03/01/02	Report	Building 50 Sewer Lines Sampling Analytical Results
87	26	04/11/08	Manifests	Dayton SVE Soil Disposal
88	27	Mar-Apr 2001	Report	Off-site Drilling Water Disposal Analytical Results
89		Dec 1999	CD	Dayton Thermal Products Plant ArcView Project
90		4/17/2007	CD	Behr VOC Plume Report

#1

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MAP: HISTORICAL SOURCE AREA MAP

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DRAWING: PLOT AND SEWER PLAN

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MAP: UTILITY MAP FROM 1967 INDUSTRIAL WASTE STUDY

☐ **Other:**

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DRAWING: DIAMLERCHRYSLER-DAYTON THERMAL PRODUCTS FAMILY SCHEMATIC

☐ **Other:**

#5

SDMS US EPA Region V

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MAP: BURIED UTILITIES

☐ **Other:**

#6

REGIONAL AIR POLLUTION CONTROL AGENCY
Serving Clark, Darke, Greene, Miami, Montgomery & Preble Counties
451 W. Third Street, P.O. Box 972, Dayton, Ohio 45422-1280
Phone: (937) 225-4435 Fax: (937) 225-3486
Visit our Home Page at: http://www.rapca.org

JUL 31 1998

July 27, 1998

Ms. Kimberly Blomker
Leggette, Brashears & Graham, Inc.
1210 West County Road E, Suite 700
Saint Paul, MN 55112

Re: PTI exemption for SVE system at Chrysler Dayton Thermal Systems (Facility ID 0857040734)

Dear Ms. Blomker:

On July 23, 1998, you submitted a Permit to Install (PTI) exemption request for a soil vapor extraction (SVE) system at Chrysler Dayton Thermal Systems. Within the PTI exemption request, you indicate that actual emissions of volatile organic compounds (VOC) are less than 10 pounds per day after controls, a granular activated carbon bed. In addition, the letter indicated that the operation of the SVE system would be temporary, between 6 and 12 months.

Pursuant to Ohio Administrative Code (OAC) rule 3745-15-05(D), the SVE proposed in your July 23, 1998 letter is a "de minimis" air contaminant source; and therefore, does not require a PTI. In accordance with the aforementioned rule, the operator of the SVE is required to maintain records that adequately demonstrate that actual emissions of any regulated pollutant do not exceed 10 pounds per day (or 1 ton per year of any hazardous air pollutant).

In accordance with OAC rule 3745-15-05(E), all the following information, if applicable, shall be adequate to demonstrate that actual emissions do not exceed 10 pounds per day (or 1 ton per year HAP):

1. A narrative description of how the emissions from the SVE were determined and maintained at or below the daily exemption level, and for emissions of HAP at or below the annual exemption level;

2. A description of the air pollution control equipment used on the SVE and a statement that the source is not capable of operating without the pollution control equipment functioning;

3. A copy of any report of the results of any emission test that was conducted

following Ohio EPA approved methods;

4. A description of all production constraints required for the SVE to comply with the exemption level;

5. Records of actual operations that demonstrate that the daily and annual emissions from the SVE were maintained at or below the exemption level by the by the use of necessary production constraints of pollution control equipment;

6. A list of similar emissions units at Chrysler Dayton Thermal Products, and a statement for each source of the annual potential emissions;

7. A summation of the total emissions from each exempt or similar emissions unit, a summation of stated potential emissions from all emissions units identified in (6.), and a certification under oath that the applicable exemption levels were compliant.

Thank you for your cooperation with these matters. If you have any questions or concerns, please feel free to contact me at (937)225-5923.

Sincerely,

James S. Pellegrino Jr.

James S. Pellegrino Jr.
Air Pollution Control Specialist
Abatement Unit

c: Joe Whitlock, Chrysler
file

saved: h:\jim\svesys\chrysler.wpd

LEGGETTE, BRASHEARS & GRAHAM, INC.

PROFESSIONAL GROUND-WATER AND
ENVIRONMENTAL ENGINEERING SERVICES

NORTHPARK CORPORATE CENTER
1210 WEST COUNTY ROAD E
SUITE 700
ST. PAUL, MN 55112
612-490-1405
FAX 612-490-1006

July 23, 1998

Mr. Timothy A. Wilson, Permit Supervisor
Combined Health District
Ohio Environmental Protection Agency
451 West Third St. P.O. Box 972
Dayton, OH 45422

Re: **Permit to Install Exemption**
Dayton Thermal Products Plant
Dayton, Ohio

Dear Mr. Wilson:

On behalf of Chrysler Corporation, Leggette, Brashears & Graham, Inc. (LBG) has prepared the enclosed documentation to request a Permit to Install Exemption. The attached documents refer to the operation of a short-term remediation project located within building 40B at the Dayton Thermal Products Plant located at 1600 Webster Street in Dayton, Ohio.

LBG intends to install and operate a temporary soil vapor extraction (SVE) system prior to planned future soil excavation related to the installation of plant-related manufacturing equipment. Soil-vapor extraction involves the physical removal of volatile organic compounds (VOCs) from impacted subsurface soils due to an applied vacuum on an extraction well, which volatilizes the compounds of concern.

Twelve shallow and twelve deep SVE wells have been installed within the plant. The wells will be operated cyclicly with only the deep or shallow manifold in operation at any given time. The wells will operate at approximately 55 standard cubic feet per minute (scfm) each, for a total system flow of 660 scfm. Vapor phase granular activated carbon will be used to control and reduce air emissions from the SVE system to less than 10 pounds of VOCs per day. The SVE system will be in operation for a period of 6 to 12 months.

Based on information included with this application, and rule 3745-31-02 of the Administrative Code, Permit to Install Exemptions/Permanent Exemptions (A)(1)(nn), which states:

> "(nn).Cleanup activities associated with the removal or remedial action conducted entirely on site, where such remedial action is selected and carried out in compliance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) section 121 (E) and where such action meets all applicable air pollution emission limits and policies."

And the Discretionary Exemptions (A)(2)(g), which states:

"(g). The director may, at his discretion and in writing, exempt any treatability studies or on-site response actions (cleanup operations) that meet all applicable air emission limits and policies from the requirement to obtain a Permit to Install. Anyone requesting this exemption must provide the director with sufficient information to make this decision."

LBG requests that this temporary remediation project be granted a Permit to Install Exemption. Enclosed with this application, please find the following attachments:

1. Emissions Activity Category Form Process Operation
2. Process Flow Diagram
3. Site maps of Dayton Thermal Products Plant and building 40B
4. Uncontrolled Air Emission Rate Calculations (assuming no declining emissions)
5. Pilot Test Analytical Results (3/20/98)
6. Specifications for vapor phase granular activated carbon vessels for emission controls

Please note that air emission calculations and subsequent summary on the Emissions Activity Category Form Process Operation sheet, are calculated based on ***no declining concentrations and uncontrolled emissions*** which result in a worst case scenario. SVE VOC emission concentrations typically do not remain constant over an extended period of time. The emission concentrations follow a first order decay rate, resulting in decreasing emissions over the duration of the project. LBG intends to operate the SVE system using vapor phase granular activated carbon, as an emission control device to achieve permissible VOC levels as required by Ohio Environmental Protection Agency.

We appreciate your consideration of this request. Should you have any questions or if you require additional information, please contact me at (612) 490-1405.

Sincerely,

LEGGETTE, BRASHEARS & GRAHAM, INC.

K. Blomker

Kimberly Blomker
Environmental Engineer II

KRB
Attachments
cc: Mr. Gary Stanczuk, Chrysler

Attachment 1
Emissions Activity Category Form
Process Operation

FOR OHIO EPA USE ONLY
DATE APPLICATION RECEIVED: _____
FACILITY ID: _____

EMISSIONS ACTIVITY CATEGORY FORM
PROCESS OPERATION

OEPA EMISSIONS UNIT ID _____ (if established)

[Note: If there is more than one end product for this process, copy and complete this pag for each additional product (see instructions).]

1. End product of this process: Soil Remediation Project, N/A

2. Hourly production rates (indicate appropriate units):

   Average production: <0.42 lb/hr Total VOCs (controlled)
   Maximum production: 1.46 lb/hr Total VOCs (uncontrolled)

3. Projected maximum annual production (indicate appropriate units): 12,775 lb/yr Total V (uncontrol

4. Actual annual production (indicate appropriate units): < 1 ton/yr Total VOCs (controlled)

5. Type of operation:

   ☒ continuous

   ☐ batch; if batch indicate:
   minimum cycle time _____ minutes
   minimum time between cycles _____ minutes

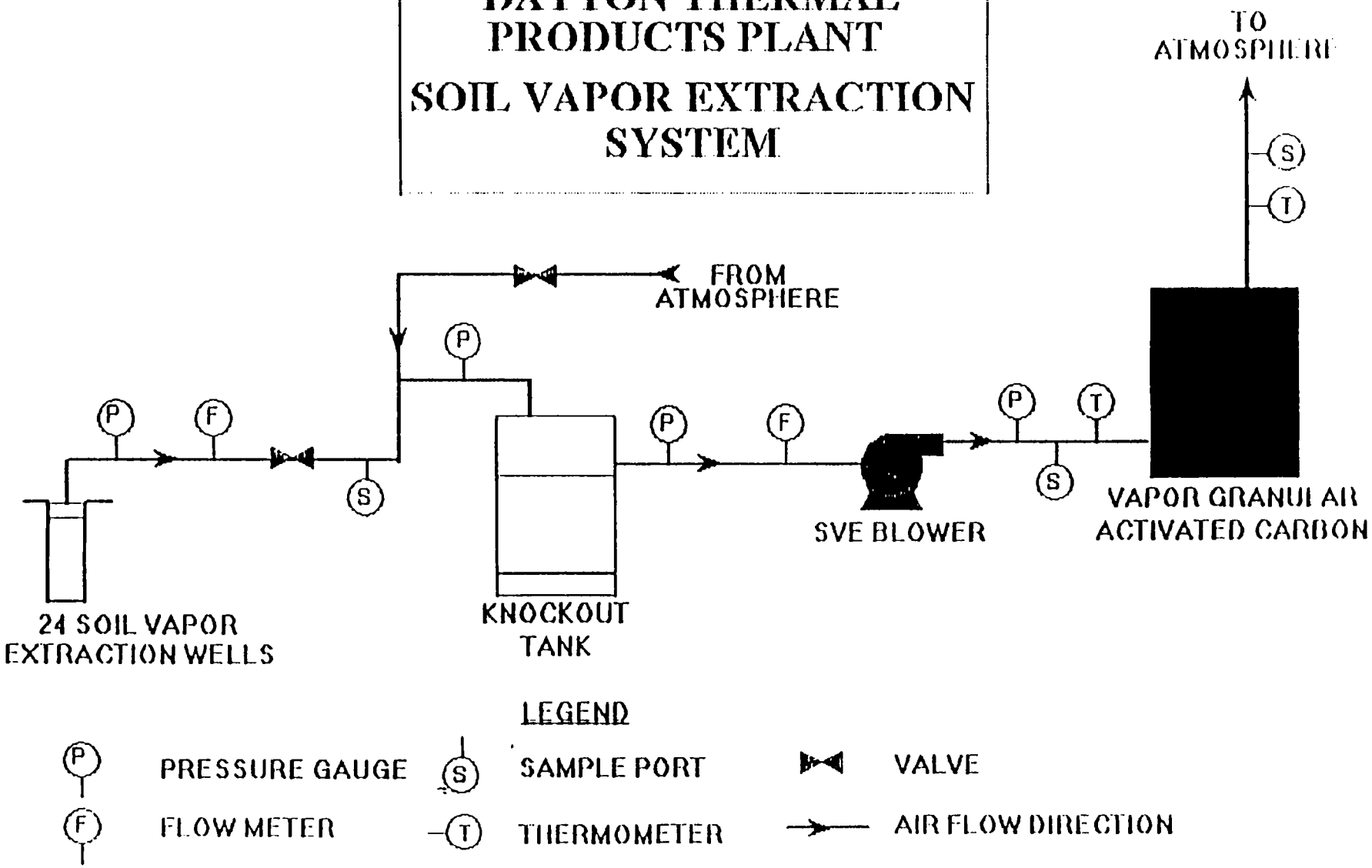
6. Materials used in process at maximum hourly production rate:

Material	Physical State at Standard Conditions	Principle Use	*Uncontrolled Amount (lbs/hr)
1,1-Dichloroethene	Vapor	Compound Removed	0.205
1,1-Dichloroethane	Vapor	Compound Removed	0.047
cis-1,2-Dichloroethene	Vapor	Compound Removed	0.114
1,1,1-Trichloroethane	Vapor	Compound Removed	0.124
Trichloroethene	Vapor	Compound Removed	0.866
Tetrachloroethene	Vapor	Compound Removed	0.106

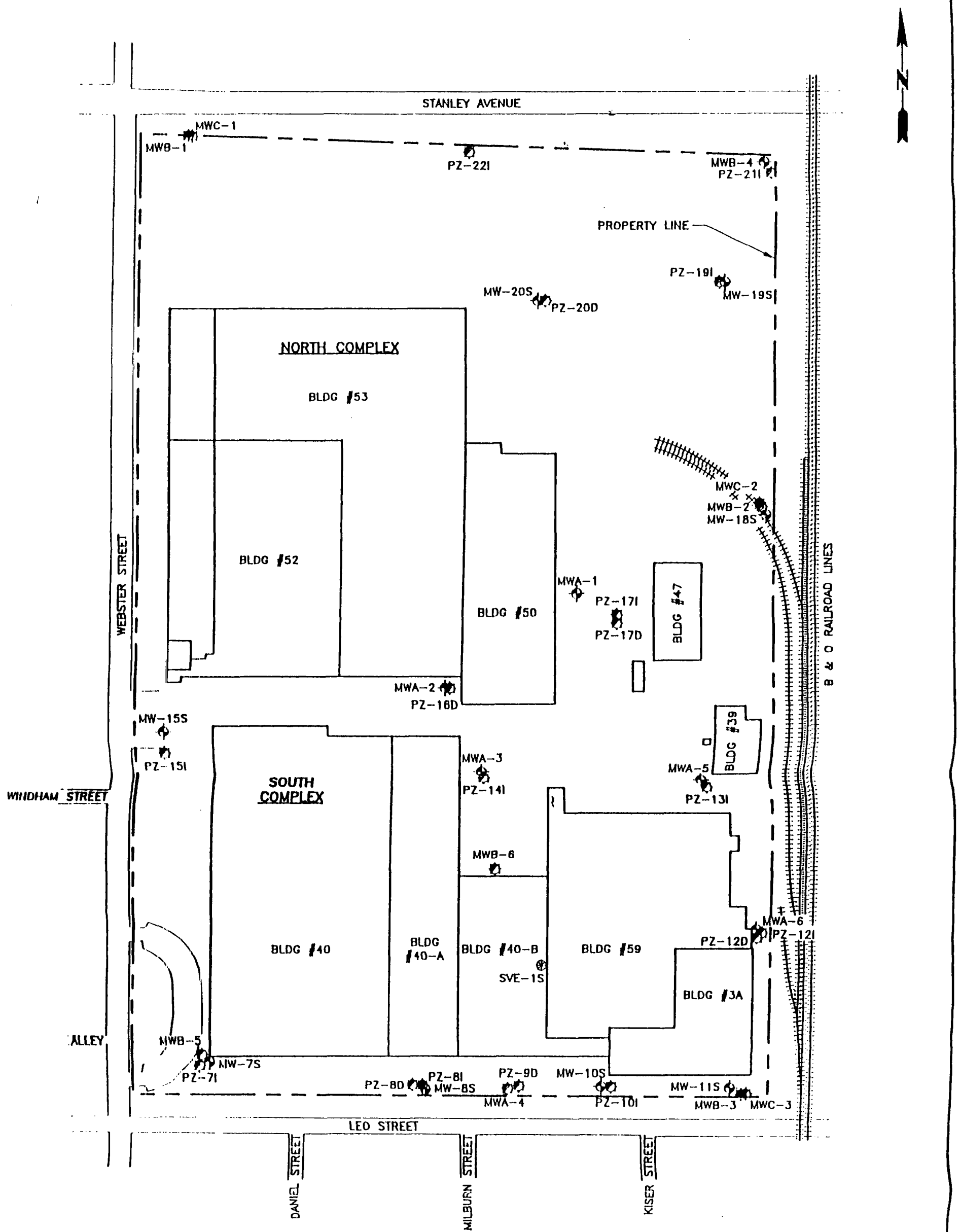
Attachment 2
Process Flow Diagram

DAYTON THERMAL PRODUCTS PLANT

SOIL VAPOR EXTRACTION SYSTEM



Attachment 3
Site Maps



SOURCE: CLEAN TECH, INC.

DATE	REVISED
1/98	MW & PZ SURVEY

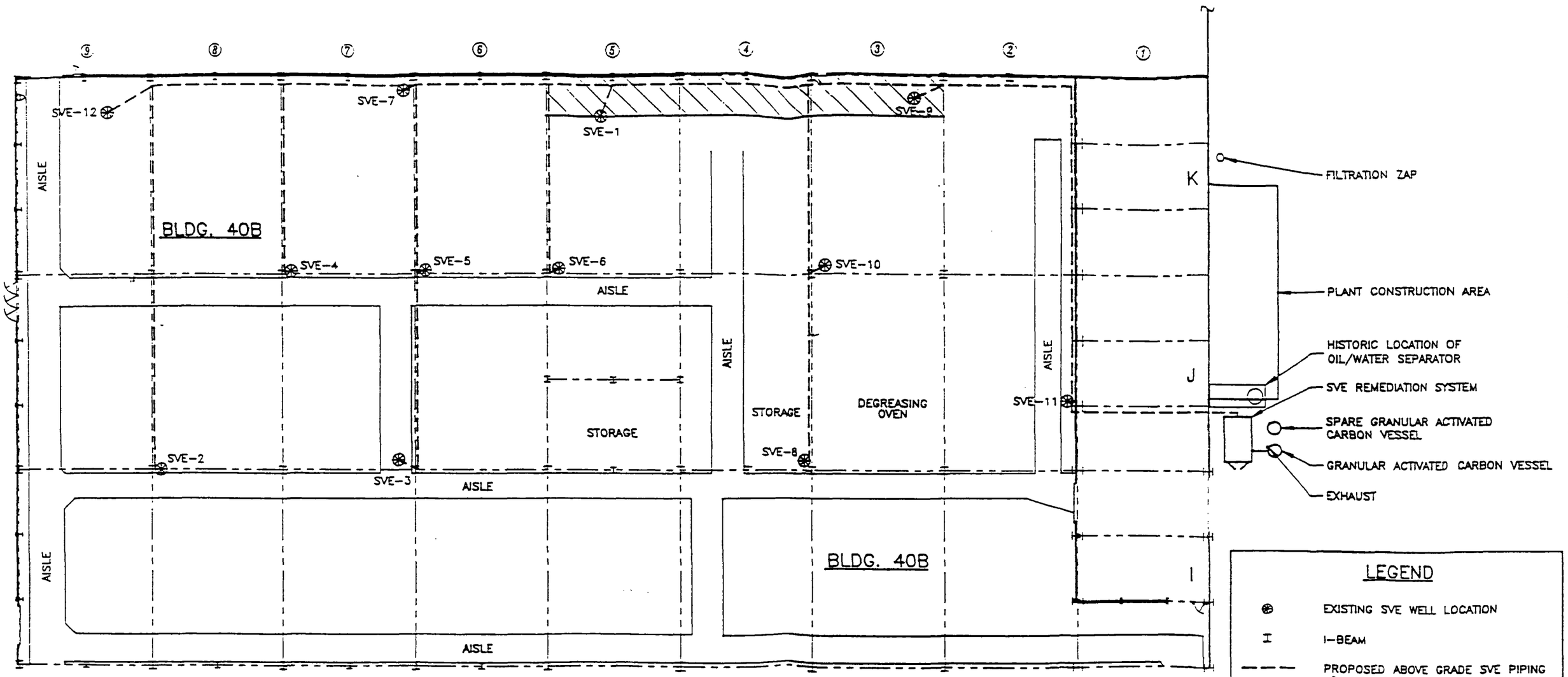
Prepared By:
LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Ground-Water and Environmental Services
Northpark Corporate Center
1210 W. County Road E, Suite 700
St. Paul, MN 55112
(612) 490-1405

DAYTON THERMAL PRODUCTS PLANT

DAYTON, OHIO

SITE MAP

FILE:	DATE:	FIGURE:
3CHDA04P.DWG	JULY 1998	



LEGEND

- ⊛ EXISTING SVE WELL LOCATION
- I I–BEAM
- ——— PROPOSED ABOVE GRADE SVE PIPING 4"ø SCH40 PVC, ANCHOR TO I–BEAM WALL

NOTE:
PIPING FROM THE SVE WELLHEAD TO THE I–BEAM COLUMN IS 2"ø SCH40 PVC AND IS BELOW GRADE

0 30
SCALE IN FEET

DATE	REVISED

Prepared By:
LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Ground–Water and Environmental Services
Northpark Corporate Center
1210 W. County Road E, Suite 700
St. Paul, MN 55112
(612) 490–1405

DAYTON THERMAL PRODUCTS PLANT
DAYTON, OHIO

LOCATION OF SVE SYSTEM & WELLS IN BUILDING 40B

FILE: 3CHDAC55.DWG | DATE: JULY 1995 | FIGURE:

Attachment 4
Uncontrolled Air Emission Rate Calculations
(assuming no declining emissions)

DAYTON THERMAL PRODUCTS PLANT
DAYTON, OHIO

UNCONTROLLED AIR EMISSION RATES
(assuming no declining emissions)

Compound	Worst Case SVE Pilot Test Emission Rate (ug/L)*	Design Flow Rate per Well (scfm)	Total System Design Flow Rate (scfm)	Calculated Uncontrolled Emission Rate per Well (lb/hr)	Calculated Uncontrolled Emission Rate per Well (lb/day)	Calculated Uncontrolled System Emission Rate (lb/hr)	Calculated Uncontrolled System Emission Rate (lb/day)
1,1-Dichloroethene	83	55	660	0.017	0.411	0.205	4.926
1,1-Dichloroethane	19	55	660	0.004	0.094	0.047	1.128
cis-1,2-Dichloroethene	46	55	660	0.009	0.228	0.114	2.730
1,1,1-Trichloroethane	50	55	660	0.010	0.247	0.124	2.967
Trichloroethene	350	55	660	0.072	1.731	0.866	20.772
Tetrachloroethene	43	55	660	0.009	0.213	0.106	2.552
Total VOCs	**591**	**55**	**660**	**0.122**	**2.923**	**1.461**	**35.076**

ug/L: microgram per liter
scfm: standard cubic feet per minute
lb/hr: pounds per hour
lb/day: pounds per day

*Worst case emission rates determined from sve pilot test results on shallow and deep sve wells (attachment 5). Emission calculations are based on 12 wells operating at any given time, and do not consider declining emissions which typically follow a first order decay rate.

Attachment 5
Pilot Test Analytical Results (3/20/98)

PRECISION ENVIRONMENTAL

Field Monitoring and Testing Services

[illegible] Main Street
Minneapolis, Minnesota 55[illegible]
(612) 730-9787 - FAX (612) 73[illegible]

Report Date	23-Mar-98
Analytical Report No:	98-034
Client Name:	Leggette Brashears & Graham, Inc.
Address:	1210 W County Road E
City, State, Zip:	St. Paul, Minnesota 55112
Project Name:	Dayton Thermal Products Plant
Sample collection/analysis date:	3/18/98 - 3/19/98

Sample I.D.:	SVE-1S	SVE-1S	SVE-1D	SVE-1D
Matrix:	Air	Air	Air	Air
Detection Limit / Units	1.0 ug/L	0.01 PPMv	1.0 ug/L	0.01 PPMv
Analytes: 8260 + MDH 465D				
(F12) Dichlorodifluoromethane	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND
Vinyl Chloride	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND
(F21) Dichlorofluoromethane	ND	ND	ND	ND
(F11) Trichlorofluoromethane	ND	ND	ND	ND
Ethyl Ether	ND	ND	ND	ND
1,1-Dichloroethene	7.0	1.6	8.3	1.9
(F113) Trichlorotrifluoroethane	ND	ND	ND	ND
Acetone	ND	ND	ND	ND
Allyl Chloride	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND
trans-1,2-Dichloroethene	ND	ND	ND	ND
Methyl tert-butyl ether	ND	ND	ND	ND
1,1-Dichloroethane	1.5	3.4	1.9	4.3
2,2-Dichloropropane	ND	ND	ND	ND
cis-1,2-Dichloroethene	4.6	1.1	3.8	8.8
Methyl Ethyl Ketone	ND	ND	ND	ND
Bromochloromethane	ND	ND	ND	ND
Tetrahydrofuran	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND
1,1,1-Trichloroethane	5.0	8.4	4.0	6.7
1,1-Dichloropropene	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND
Benzene	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND
Trichloroethene	350	50	250	43
1,2-Dichloropropane	ND	ND	ND	ND
Dibromomethane	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND
cis-1,3-Dichloropropene	ND	ND	ND	ND
Methyl Isobutyl Ketone	ND	ND	ND	ND
Toluene	ND	ND	ND	ND
trans-1,3-Dichloropropene	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND
Tetrachloroethene	29	3.9	4.3	5.8
1,3-Dichloropropane	ND	ND	ND	ND

PRECISION ENVIRONMENTAL

Field Monitoring and Testing Services

[illegible] Main Street
Minneapolis, Minnesota [illegible]
(612) [illegible] • FAX (612) [illegible]

Report Date:	23-Mar-98
Analytical Report No:	98-034
Client Name:	Leggette Brashears & Graham, Inc.
Address:	1210 W County Road E
City, State, Zip:	St. Paul, Minnesota 55112
Project Name	Dayton Thermal Products Plant
Sample collection/analysis date:	3/18/98 - 3/19/98

Sample I.D.: Matrix Detection Limit / Units	SVE-1S Air 1.0 ug/L	SVE-1S Air 0.01 PPMv	SVE-1D Air 1.0 ug/L	SVE-1D Air 0.01 PPMv
Analytes: 8260 + MDH 465D				
Dibromochloromethane	ND	ND	ND	ND
1,2-Dibromoethane	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND
Xylenes	ND	ND	ND	ND
Styrene	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND
Isopropylbenzene	ND	ND	ND	ND
Bromobenzene	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND
1,2,3-Trichloropropane	ND	ND	ND	ND
n-Propylbenzene	ND	ND	ND	ND
2-Chlorotoluene	ND	ND	ND	ND
1,3,5-Trimethylbenzene	ND	ND	ND	ND
4-Chlorotoluene	ND	ND	ND	ND
tert-Butylbenzene	ND	ND	ND	ND
1,2,4-Trimethylbenzene	ND	ND	ND	ND
sec-Butylbenzene	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND
p-Isopropyltoluene	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND
n-Butylbenzene	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND
1,2,3-Trichlorobenzene	ND	ND	ND	ND

Analysis by GC PID/FID/ELCD (EPA method 18) modified TO-14 for 8260 analytes.
ND = not detected

Approved by

Bruce J. Nassar
Analytical Services

Reviewed by

Richard R. Dahl
Analytical Chemist

Attachment 6
Specifications for granular activated carbon vessels

Product Information Bulletin

Bulletin No. 12

CETCO Industrial Services Group

2/94

AQUATEC V-SERIES
Modular Vapor Adsorbers

CETCO Industrial Services Group offers a complete line of modular vapor phase adsorbers. The **Aquatec V-Series** is designed as a low cost, vapor adsorber that is portable and can be easily put into service. The **Aquatec V-Series** adsorbers are designed for a maximum pressure of 15 psi and a vacuum of 10" water column and are available in sizes designed to hold from 500 to 2000 lbs of carbon.

Model #	GAC ft³/lbs	Recommended Max. Flow Rate	Estimated Weight (Empty/Shipping)
V1M	36/1000	575 cfm	1125/2125
V1.5M	54/1500	750 cfm	1250/2750
V2M	72/2000	750 cfm	1250/3250

Important Features

- Durable carbon steel construction.
- Lifting lugs and forklift guides to facilitate moving.
- Upper and lower open-air plenum area designed for maximum carbon utilization.
- Designed for either upflow or downflow.
- Fitting for CETCO Carbon Saturation Indicator or effluent sample port.
- 6" thr'd influent/effluent connections.
- Condensate drain plug.
- Low profile design.
- 16" drum type manway for easy access.
- Rust-inhibitive epoxy primer and acrylic polyurethane top coat exterior.
- Can be filled with any of CETCO's virgin or reactivated granular or extruded carbons.
- Dished top and bottom heads allow higher operating pressures and light vacuum.
- Shipped with carbon & ready for service.
- All models available for lease

For More Information and Pricing

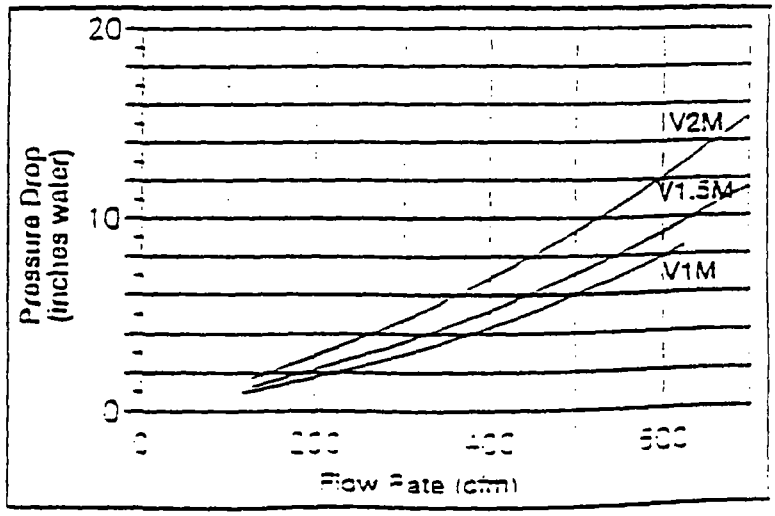
Call

1-800-527-9948

and Talk to One of Our

Knowledgeable Technical

Support Personnel

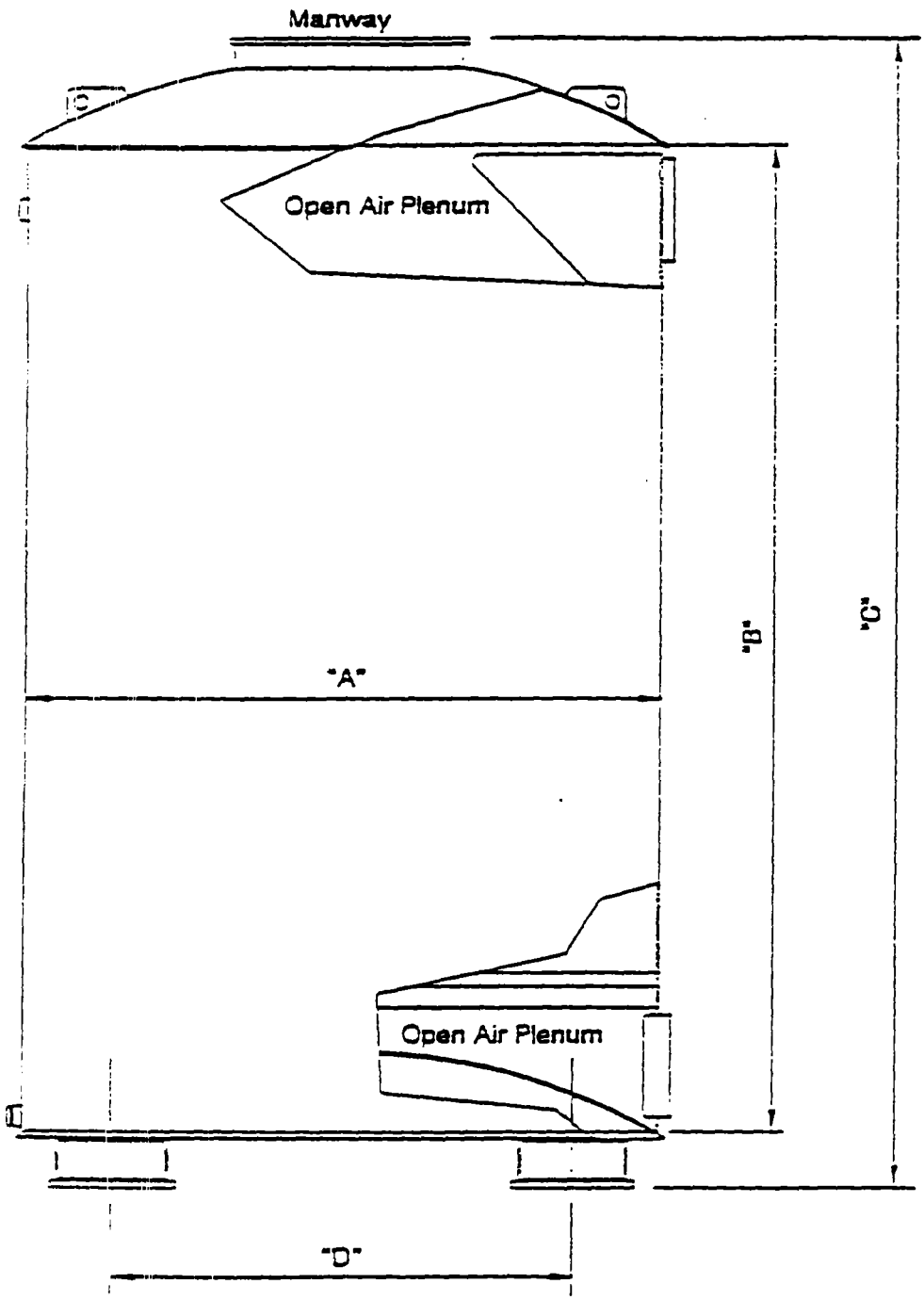


Carbon volume and weight based on Bituminous Carbon @ 30 lbs/ft³
Estimated pressure drop based on virgin 4x10 carbon
Design and specifications subject to change without notice

1351 West Shure Drive • Arlington Heights, IL 60004 • (800) 527-9948 • (708) 392-5300 • Fax (708) 506-4150

Product Information Bulletin (Aquatec V-Series)

Bulletin No. V2 2/96



Available Options:

- CETCO Carbon Saturation Indicators
- FDA Approved & Industrial Use Plasite Linings
- Custom Linings
- Custom Colors
- Stainless Steel Construction
- Camloc Quick Connects
- Isolation Butterfly Valves
- Flanged Inlet/Outlets
- PRVs
- Higher operating pressures or vacuums
- Skid Mounted SVE Systems
- Call for Your Custom Configuration

CETCO
Industrial Services Group
1-800-527-9948

Drawing not to scale.
Design and specifications subject to change without notice.

MODEL #	Diameter "A"	Can Hgt. "B"	Inlet/Outlet "C"	Forklift Guides "D"	Overall Hgt. "E"
V1M	45½"	72"	6" fpt	33"	84±"
V1.5M	48"	84"	6" fpt	33"	95±"
V2M	48"	84"	6" fpt	33"	95±"

TABLE 1

DAIMLERCHRYSLER CORPORATION
DAYTON THERMAL PRODUCTS PLANT
DAYTON, OHIO

MASS RECOVERED SINCE SYSTEM START-UP

Sample Location	Date	Average Flow Rate (cfm)	Days Of System Operation**	1,1,1-TRICHLOROETHANE		TRI-CHLOROETHENE		TETRA-CHLOROETHENE		TOTAL VOCS		
				Conc. (ug/L)	Pounds Recovered	Conc. (ug/L)	Pounds Recovered	Conc. (ug/L)	Pounds Recovered	Conc. (ug/L)	lb/day	Pounds Recovered
SVE EFF	15-Aug-98	506	16	23	17	160	116	180	131	**420**	**19**	**305.62**
SVE EFF	09-Sep-98	506	26	24	28	360	426	400	473	**821**	**37**	**970.81**
SVE EFF	10-Nov-98	564	31	6.5	10	39	61	46	72	**94.5**	**5**	**148.58**
SVE EFF	03-Feb-99	437	31	9.6	12	78	95	92	112	**200.6**	**8**	**244.25**
SVE EFF	10-Mar-99	437	21	9.1	8	65	54	74	61	**152.6**	**6**	**125.87**
SVE EFF	05-Apr-99	515	3	6.6	1	43	6	49	7	**102.3**	**5**	**14.21**
SVE EFF	13-May-99	506	183	2.8	23	25	208	25	208	**54.4**	**2**	**452.76**
SVE EFF	15-Oct-99	567	39	5.8	12	26	52	24	48	**60.2**	**3**	**119.65**
CATOX EFF	15-Oct-99	567	39	ND		1.1	2	3.8	8	**4.9**	**0**	**9.74**
%EFFICIENCY				100.0		95.8		84.2		91.9		
SVE EFF	15-Dec-99	527	16	25	19	82	62	75.6	57	**257.0**	**12**	**194.77**
CATOX EFF	15-Dec-99	527	16	0.8	1	3.1	2	17.5	13	**44.1**	**2**	**33.42**
%EFFICIENCY				96.8		96.2		76.9		82.8		
SVE EFF	13-Jan-00	567	1	13.9	1	37.2	2	33.9	2	**139.9**	**7**	**7.13**
CATOX EFF	13-Jan-00	567	1	ND		2.7	0	9.3	0	**27.8**	**1**	**1.42**
%EFFICIENCY				100.0		92.7		72.6		80.1		
TOTAL:			**367**		**130**		**1082**		**1171**			**2,597**

Notes:

Granular Activated Carbon, Effluent ND

No Emission Control

cfm: Cubic feet per minute

ug/L: Micrograms per liter

VOCs: Volatile organic compounds

conc.: Concentration

ND: Non Detect

NT: Not Tested

**Accounts for Downtime

TABLE 1

DAIMLERCHRYSLER CORPORATION
DAYTON THERMAL PRODUCTS PLANT
DAYTON, OHIO

MASS RECOVERED SINCE SYSTEM START-UP

Sample Location	Date	Average Flow Rate (cfm)	Days Of System Operation**	VINYL CHLORIDE		1,1-DICHLOROETHENE		FREON 113		1,1-DICHLOROETHANE		cis-1,2-DICHLOROETHENE	
				Conc. (ug/L)	Pounds Recovered	Conc. (ug/L)	Pounds Recovered	Conc. (ug/L)	Pounds Recovered	Conc. (ug/L)	Pounds Recovered	Conc. (ug/L)	Pounds Recovered
SVE EFF	15-Aug-98	506	16	ND		ND		ND		19	14	38	28
SVE EFF	09-Sep-98	506	26	ND		ND		ND		5	6	32	38
SVE EFF	10-Nov-98	564	31	ND		ND		ND		1	2	3.0	5
SVE EFF	03-Feb-99	437	31	ND		ND		ND		10	12	21.0	26
SVE EFF	10-Mar-99	437	21	NT		NT		NT		ND		4.5	4
SVE EFF	05-Apr-99	515	3	NT		NT		NT		ND		3.7	1
SVE EFF	13-May-99	506	183	NT		NT		NT		ND		1.6	13
SVE EFF	15-Oct-99	567	39	NT		NT		NT		1.6	3	2.8	6
CATOX EFF	15-Oct-99	567	39	NT		NT		NT		ND		ND	
%EFFICIENCY										100.0		100.0	
SVE EFF	15-Dec-99	527	16	4	3	3	2	44.0	33	4	3	19.4	15
CATOX EFF	15-Dec-99	527	16	ND		ND		22.0	17	ND		0.7	1
%EFFICIENCY				100.0		100.0		50.0		100.0		96.4	
SVE EFF	13-Jan-00	567	1	5	0.3	2	0.1	30.0	2	4	0	13.9	1
CATOX EFF	13-Jan-00	567	1	ND		ND		15.0	1	ND		0.8	0
%EFFICIENCY				100.0		100.0		50.0		100.0		94.2	
TOTAL:			367		3.29		2.38		34.88		40		134

Notes:

Granular Activated Carbon, Effluent ND

No Emission Control

cfm: Cubic feet per minute

ug/L: Micrograms per liter

VOCs: Volatile organic compounds

conc.: Concentration

ND: Non Detect

NT: Not Tested

**Accounts for Downtime

#7

MEMORANDUM

TO: Gary Stanczuk

FROM: Dane Olson

DATE: April 5, 1999

SUBJECT: City Permits

Enclosed are copies of the City of Dayton permits for right-of-way borings and a letter from the Department of Recreation and Parks granting permission to do test borings in Claridge Park.

S:\TECH\3CHRY\DAYTON\FINALDOC\PERMITGA.MEM

E 513 REV 8 96 281662 0

CITY OF DAYTON, OHIO

DEPARTMENT OF PUBLIC WORKS

• DIVISION OF ENGINEERING •

Amount Paid $ 290.00 **No.** 1008702 Date 3-25 19 99

Permission Is Hereby Granted To Legette, Brashers, + Graham, Inc

To Erect, Construct or Install In Accordance With City Ordinances

Excavation In street for			
Sidewalk			
Temporary Driveway			
Permanent Driveway			
Setting Poles or Anchor			
Moving Heavy Vehicles			
Miscellaneous	29 Test Holes - Leo St, Webster St, Daniel St, Milburn Ave, Kiser St, Jonar St, Jonard St, Deeds Ave.	290	00
Sundry Sales			
Deposit			

Remarks V16957

Property Owned by

Lot No. Location Leo St, Webster St, Daniel St, Milburn Ave, Kiser St, Jonar St, Jonard St, Deeds Ave.

Permit Issued by City Engineer Permit Expires 19

1 Per CLERK

Contractors copy

TRAFFIC CONTROL REQUIREMENTS

DANIEL, KISER, LAMAR, LEO, LEONHARD AND WEBSTER STREETS AND DEEDS AND MILBURN AVENUES

IT IS THE INTENTION TO PERFORM ALL OF THE REQUIRED WORK WITH THE LEAST INCONVENIENCE AND THE MAXIMUM SAFETY TO THE CONTRACTOR AND THE TRAVELING PUBLIC. IN ADDITION TO THE REQUIREMENTS FOR MAINTAINING TRAFFIC AS INDICATED IN THE OHIO MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD), LATEST EDITION, AND SECTION 614, CITY OF DAYTON, CONSTRUCTION AND MATERIAL SPECIFICATIONS, LATEST EDITION, THE FOLLOWING REQUIREMENTS SHALL APPLY:

1. THE INSTALLATION AND MAINTENANCE OF ALL TRAFFIC CONTROL AND TRAFFIC CONTROL DEVICES REQUIRED BY THE OMUTCD SHALL BE PROVIDED BY THE CONTRACTOR.

2. ALL TRAFFIC LANES SHALL BE MAINTAINED AT ALL TIMES ON DANIEL, DEEDS, KISER, LAMAR, LEO, LEONHARD, MILBURN AND WEBSTER STREETS.

3. PEDESTRIAN TRAFFIC SHALL BE MAINTAINED.

4. VEHICULAR AND PEDESTRIAN ACCESS TO ALL BUSINESSES AND RESIDENCES SHALL BE MAINTAINED AT ALL TIMES.

5. IF YOU HAVE ANY QUESTIONS REGARDING THESE REQUIREMENTS, PLEASE CONTACT RHONDA MUNDY, CITY OF DAYTON, BUREAU OF TRAFFIC ENGINEERING AT 443-4075.

L.L. _____

N29

Approved as noted:

Provide a four(4') minimum clearance between test holes and existing water mains and storm sewers. Call OUPS and Dan Blair(City of Dayton Water Dept.) at 443-3739 for utility locations.

Approval of these Geoprobe borings in no way provides for acceptance, by the City of Dayton, of any waste material associated with the drilling of the borings. Any waste water and waste soil shall be handled by Leggette, Brashears and Graham, Inc. in accordance with all applicable federal, state and local rules and regulations.

At the completion of the Geoprobe boring project, Leggette, Brashears and Graham, Inc. shall properly abandon the borings in accordance with all applicable federal, state and local rules and regulations.

Leggette, Brashears and Graham, Inc. will provide a copy of the data generated from this project and the previous Gore-Sorber project to the City of Dayton Division of Enviromental Management within 30 days of the completion of this Geoprobe boring project. Failure to do so will jeopardize any forthcoming requests.

CITY OF DAYTON
DEPT OF PUBLIC WORKS
101 W. THIRD ST.

DATE 03.25.'99 THU

NON-ADD #	8702
MISC	$290.00
TOTAL	$290.00
CHECK	$290.00
CLERK 1	NO.000913
TIME 14:33	0000

Department of Recreation and Parks
(937) 263-8400
(937) 263-6019 (FAX)

Administrative Office
2013 West Third Street
Dayton, Ohio 45417

APR 01 1999

March 26, 1999

Mr. Kenneth D. Vogel, PG, CHMM
Senior Associate
Leggette, Brashears & Graham, Inc.
1210 West County Road E, Suite 700
St. Paul, MN 55112

Subject: Sampling Access – Claridge Park

Dear Mr. Vogel:

In response to your letter of March 12th, you have my permission to test bore in Claridge Park. If you have any further questions, please contact Mr. Greg Duckro of our Parks and Forestry Division at 937-461-5300.

Sincerely,

Billy C. Russell
Acting Director

BCR:lsp

LEGGETTE, BRASHEARS & GRAHAM, INC.

PROFESSIONAL GROUND-WATER AND
ENVIRONMENTAL ENGINEERING SERVICES

NORTHPARK CORPORATE CENTER
1210 WEST COUNTY ROAD E
SUITE 700
ST. PAUL, MN 55112
612-490-1405
FAX 612-490-1006

March 12, 1999

Mr. Estill G. Johnson, Chief Engineer
City of Dayton
Department of Public Works
Division of Civil Engineering
101 West Third Street
Dayton, Ohio 45402

RE: Permit Application/Modification for
Making Openings in a Public Way

Dear Mr. Johnson:

Leggette, Brashears & Graham, Inc. (LBG), on behalf of DaimlerChrysler Corporation, hereby submits this permit application to obtain permission from the city of Dayton to install test holes along city right-of-ways (ROWs) to the east of Webster Street, and both north and south of Leo Street. The test holes will be advanced using a Geoprobe® to collect soil and ground-water samples. Samples will be analyzed in the field utilizing a mobile environmental laboratory. It is anticipated that it will take approximately 3 weeks to complete and sample all of the test holes. Each test hole will be abandoned upon completion of sampling at each location.

PERMIT MODIFICATION

Because the scope of work is investigative in nature, the actual number and location of test holes will be dependent on mobile laboratory analytical results, field observations, and the marked location of utilities and utility corridors. The investigation process is iterative, based on results obtained in the field. For instance, field results may indicate the need for additional test holes at some locations not originally anticipated. Under current permit procedures, another permit application would be required before unanticipated test holes could be advanced. As a result, a remobilization of geologists and contractors would be required. ***Therefore, we request that the city of Dayton consider a modification of its existing permit procedures to allow greater flexibility in efficiently carrying out environmental investigation activities associated with this and future activities.***

PERMIT APPLICATION AND PLAN

The following information is provided as required in Section 2 of the "City of Dayton, Department of Urban Development, Rules and Regulations for Making Openings in a Public Way, Dayton, Ohio, January 1, 1991."

The test holes will be made by making a small hole (approximately 2.0-inch diameter) using a Geoprobe® to a maximum depth of 50 feet. The plan calls for 29 test holes to be installed at the approximate ROW locations illustrated on plate 1. Field conditions and marked utility corridors will dictate the exact locations of test holes. After the sampling is complete, the holes will be properly sealed and abandoned with bentonite.

Plate 1 illustrates the proposed locations of the test holes. ***The number and location of test holes is variable. As such, maximum flexibility in the permitting process with the city of Dayton is greatly desired. In the event that additional test holes are required, LBG will notify the Department of Public Works, provide a revised location map, and provide the required additional permit fee for each test hole. Timely review and approval of such an additional request during our field crew's mobilization would be greatly appreciated.***

The test holes will be located along Webster, Daniel, Milburn, Kiser and Deeds Streets (between Leo and Leonard Streets), along Deeds Street to the north near the Kiser Intermediate School, and within Claridge Park. The plate also illustrates currently surveyed underground utility locations as provided by the Ohio Utility Protection Service and the individual utility service companies. The Ohio Utility Protection Service and the city of Dayton sewer and water departments will be notified of the planned work, a field utility meeting will be held, and utilities marked before any invasive work is commenced. Following marking of utilities, a licensed surveyor will conduct a utility survey while the test holes are being sampled. Surveyed utility locations will be submitted with final work product documents, following completion of the work.

When possible, test holes will be located between the street curbs and sidewalks in the boulevards. If a boulevard is not present, the holes will be located immediately off the edge of the sidewalk in grassy areas so as not to break apart any concrete and to ensure staying on the city ROWs. In the event there are no sidewalks, the holes will be located just off the paved or asphalt road surface. In the unlikely event a test hole needs to be placed in an asphalt or concrete surface, the surface material will be repaired to a condition equal to or better than that existing before the work was conducted. In no event will corner stones, monuments or land markers be tampered with to accommodate the investigation. If conditions occur where it is necessary to partially block a lane of traffic, the minimum traffic lane of 10 feet will be honored and the proper warning signs will be supplied and erected.

INSURANCE

In accordance with the requirements in Section 2, Leggette, Brashears & Graham, Inc. will keep in full force and effect a liability insurance policy in an amount of at least $300,000 for any one person injured in any accident and with a total liability of at least $500,000 for all persons injured in any one accident and in the amount of $300,000 for each accident as compensation for damage caused to property other than the applicant's. Copies of our insurance certificates have previously been supplied to the city.

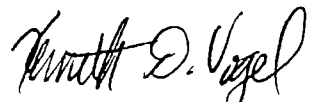
SCHEDULE

As stated in Section 2, all openings must be made within 1 week of the date of issue unless special arrangements area made. ***LBG is requesting that this time period be extended to a 6-week period to allow for necessary preparation, mobilization, and installation time.*** Initiation of the soil and water survey will commence within 3 weeks after receiving written or verbal permission from the Division of Engineering or its authorized agent(s). LBG will contact the City Engineer or authorized agent(s) 3 days prior to mobilizing to the site. The Director of Urban Development, the City Engineer and/or their authorized agent(s) will be notified upon completion of the work.

Thank you for your prompt consideration of this request. Should you have any questions, or if you require additional information, please contact me at (651) 490-1405, ext. 202.

Sincerely,

LEGGETTE, BRASHEARS, & GRAHAM, INC.



Kenneth D. Vogel, CPG, CHMM
Senior Associate

KDV:kw
cc: Gary Stanczuk
Enclosures
S:\TECH\CHRY\DAYTON\FINALDOC\GEOPRB.LTR

LEGGETTE, BRASHEARS & GRAHAM, INC.

PROFESSIONAL GROUND-WATER AND
ENVIRONMENTAL ENGINEERING SERVICES

NORTHPARK CORPORATE CENTER
1210 WEST COUNTY ROAD E
SUITE 700
ST. PAUL, MN 55112
612-490-1405
FAX 612-490-1006

March 12, 1999

Mr. Billy Russell, Acting Director
City of Dayton
Department of Parks, Recreation and Culture
325 North Paul Laurence Dunbar
Dayton, Ohio 45407

RE: Request for Sampling Access-Claridge Park

Dear Mr. Russell:

Leggette, Brashears & Graham, Inc. (LBG), on behalf of DaimlerChrysler Corporation, hereby submits this request to obtain permission from your department to install two test holes in Claridge Park. The test holes will be advanced using a Geoprobe® to collect soil and ground-water samples. Samples will be analyzed in the field utilizing a mobile environmental laboratory. It is anticipated that it will take approximately 3 days to complete and sample the test holes. Each test hole will be abandoned upon completion of sampling.

PERMIT MODIFICATION

Because the scope of work is investigative in nature, the actual number and location of test holes will be dependent on mobile laboratory analytical results, field observations, and the marked location of utilities and utility corridors. The investigation process is iterative, based on results obtained in the field. For instance, field results may indicate the need for additional test holes at some locations not originally anticipated.

PERMIT APPLICATION AND PLAN

The following information is provided as required in Section 2 of the "City of Dayton, Department of Urban Development, Rules and Regulations for Making Openings in a Public Way, Dayton, Ohio, January 1, 1991."

The test holes will be made by making a small hole (approximately 2.0-inch diameter) using a Geoprobe® to a maximum depth of 50 feet. The plan calls for two test holes to be installed at the approximate locations illustrated on plate 1. Field conditions and marked utility corridors will dictate the exact locations of test holes. After the sampling is complete, the holes will be properly sealed and abandoned with bentonite.

Plate 1 illustrates the proposed locations of the test holes. ***The number and location of test holes is variable. As such, maximum flexibility in the permitting process with the city of Dayton is greatly desired. In the event that additional test holes are required, LBG will notify the Department of Parks, Recreation and Culture, and provide a revised location map. Timely review and approval of such an additional request during our field crew's mobilization would be greatly appreciated.***

The test holes will be located within Claridge Park. The plate also illustrates currently surveyed underground utility locations as provided by the Ohio Utility Protection Service and the individual utility service companies. The Ohio Utility Protection Service and the city of Dayton sewer and water departments will be notified of the planned work, a field utility meeting will be held, and utilities marked before any invasive work is commenced. Following marking of utilities, a licensed surveyor will conduct a utility survey while the test holes are being sampled. Surveyed utility locations will be submitted with final work product documents, following completion of the work.

The proposed test holes will be located in grassy areas. In the unlikely event that the ground surface is disturbed by this sampling activity, repairs and/or restoration will be made to bring the ground surface to the original or better condition. In no event will buildings, corner stones, monuments or land markers be tampered with to accommodate the investigation.

INSURANCE

In accordance with the requirements in Section 2, Leggette, Brashears & Graham, Inc. will keep in full force and effect a liability insurance policy in an amount of at least $300,000 for any one person injured in any accident and with a total liability of at least $500,000 for all persons injured in any one accident and in the amount of $300,000 for each accident as compensation for damage caused to property other than the applicant's. Copies of our insurance certificates have previously been supplied to the city.

SCHEDULE

Initiation of the soil and water survey will commence within 3 weeks after receiving written or verbal permission from the Department of Parks, Recreation and Culture or its authorized agent(s). LBG will contact the Acting Director or authorized agent(s) 3 days prior to mobilizing to the site. The Acting Director, Director of Urban Development, the City Engineer and/or their authorized agent(s) will be notified upon completion of the work.

Thank you for your prompt consideration of this request. Should you have any questions, or if you require additional information, please contact me at (651) 490-1405, ext. 202.

Sincerely,

LEGGETTE, BRASHEARS, & GRAHAM, INC.

Kenneth D. Vogel

Kenneth D. Vogel, CPG, CHMM
Senior Associate

KDV:kw
cc: Gary Stanczuk
Enclosure
S:\TECH\CHRY\DAYTON\FINALDOC\GEOPARK.LTR

#8

OhioEPA
State of Ohio Environmental Protection Agency

STREET ADDRESS:
Lazarus Government Center
122 S. Front Street
Columbus, Ohio 43215

TELE: (614) 644-3020 FAX: (614) 644-3184

MAILING ADDRESS:
P.O. Box 1049
Columbus, OH 43216-1049

June 12, 2003

DAIMLERCHRYSLER DOCUMENT CONTROL NO.
SC001.06182003.001

CERTIFIED MAIL
7001 1940 0000 6930

Mr. Gary M. Stanczuk
DaimlerChrysler Corporation
CIMS 482-00-51
800 Chrysler Drive
Auburn Hills, Michigan 48326-2757

Dear Mr. Stanczuk:

The applications submitted for an Underground Injection Control (UIC) Class V 5X26 Area Permit to Drill and UIC Class V 5X26 Area Permit to Operate have been reviewed by Ohio EPA's Division of Drinking and Ground Waters, Underground Injection Control Unit. The UIC Unit has recommended that the Director issue the above referenced Class V Permits as your proposals comply with all applicable Ohio UIC Rules.

Therefore, a Class V Area Permit to Drill, and a Class V Area Permit to Operate are issued to you today in **FINAL** form. The permits are effective on the date of issuance. Signed copies of the final permits are enclosed.

You are hereby notified that these actions of the Director are final and may be appealed to the Environmental Review Appeals Commission (Commission) pursuant to Section 3745.04 of the Ohio Revised Code. This appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. A copy of the appeal is also requested to be sent to the Office of the Attorney General, Environmental Enforcement Section. An appeal may be filed with the Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, Ohio 43215

Sincerely,

for M.B.

Michael G. Baker, Chief
Division of Drinking and Ground Waters

CHRYSLERISSUE.ltr

Enclosure

cc: Tom Winston, Chief, SWDO (w/enclosure)
Lindsay Taliaferro III, UIC Manager
File

RECEIVED
JUN 16 2003
STATIONARY
ENVIRONMENTAL & ENERGY

OHIO ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF DRINKING AND GROUND WATERS
UNDERGROUND INJECTION CONTROL 5X26 AREA PERMIT TO DRILL AND PERMIT TO OPERATE CLASS V INJECTION WELLS

Ohio Permit Nos. UIC 05-57-10-PTD-V
UIC 05-57-10-PTO-V

Applicant: DaimlerChrysler Corporation

Address: 1000 Chrysler Drive
Auburn Hills Michigan 48326

Telephone: (248) 576-7365

Facility Name: Dayton Thermal Products

Facility Location: 1600 Webster Street, Dayton, Ohio

Latitude 39° 46' 57.3", Longitude 84° 10' 55.6"
South Plant: Section 5, North Plant: Section 6, T1 R7

Montgomery County

Description: The purpose of the injection is to create a ground water containment system to prevent the off-site migration of chlorinated volatile organic compounds and establish hydraulic control of ground water flow at the site. In addition, the reinjected ground water will be augmented with sodium lactate to promote the reductive dechlorination of the chlorinated volatile organic compounds present in the aquifer.

Issuance Date: June 12, 2003

Effective Date: June 12, 2003

Expiration Date: June 12, 2008

I ca... ...of the
of... ...ns of the Ohio
Environmental Protection Agency.

By ... Date 6/12/03

The above named applicant is hereby ISSUED a 5X26 Area Permit to Drill and a 5X26 Area Permit to Operate for the above described underground injection wells pursuant to Sections 6111.043 and 6111.044 of the Ohio Revised Code and to Chapter 3745-34 of the Ohio Administrative Code. Issuance of this 5X26 Permit to Drill and 5X26 Permit to Operate does not constitute expressed or implied approval or agreement that, if constructed and/or modified in accordance with the specifications and/or information accompanying the permit applications, the above described activity will be in compliance with applicable State and Federal laws and rules and regulations. This 5X26 Area Permit to Drill and 5X26 Area Permit to Operate is issued subject to the attached conditions which are hereby incorporated and made a part hereof.

Expiration Date: This permit shall expire at midnight on the expiration date indicated above, unless terminated or modified under Chapter 3745-34 of the Ohio Administrative Code.

Christopher Jones, Director
OHIO ENVIRONMENTAL PROTECTION AGENCY

PART I
GENERAL PERMIT COMPLIANCE

A. EFFECT OF PERMIT

The permittee is authorized to engage in the drilling and operation of 5X26 Class V underground injection wells in accordance with Chapter 3745-34 of the Ohio Administrative Code (OAC) and the conditions of these permits. Notwithstanding any other provisions of these permits, the permittee shall not construct, operate, maintain, convert, plug, abandon, or conduct any other injection activity in a manner that allows the movement of injection or formation fluids into underground sources of drinking water (USDWs) if the presence of that material may cause a violation of any primary drinking water regulation under OAC Chapter 3745-81 or may otherwise adversely affect the health of persons. Any underground injection activity not specifically authorized in these permits is prohibited. Compliance with these permits during their term constitutes compliance for purposes of enforcement, with Sections 6111.043 and 6111.044 of the Ohio Revised Code (ORC). Such compliance does not constitute a defense to any action brought under ORC Sections 6109.31, 6109.32 or 6109.33 or any other common or statutory law other than ORC Sections 6111.043 and 6111.044. Issuance of these permits does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of state or local law. Nothing in these permits shall be construed to relieve the permittee of any duties under applicable state and federal law, regulations, or permits.

B. PERMIT ACTIONS

1. Modification, Revocation, Reissuance and Termination. The Director may, for cause or upon request from the permittee, modify, revoke and reissue, or terminate these permits in accordance with OAC Rules 3745-34-07, 3745-34-23, and 3745-34-24. Also, the permits are subject to minor modifications for cause as specified in OAC Rule 3745-34-25. The filing of a request for a permit modification, revocation and reissuance, or termination, or the notification of planned changes, or anticipated noncompliance on the part of the permittee does not stay the applicability or enforceability of any permit condition.

2. Transfer of Permits. These permits may be transferred to a new owner or operator only if they are modified or revoked and reissued pursuant to OAC Rule 3745-34-22(A), 3745-34-23, 3745-34-24, 3745-34-25(D) or 3745-34-26(L)(3), as applicable.

C. SEVERABILITY

The provisions of these permits are severable, and if any provision of these permits or the application of any provision of these permits to any circumstance is held invalid, the application of such provision to any other circumstances and the remainder of these permits shall not be affected thereby.

D. CONFIDENTIALITY

In accordance with OAC Rule 3745-34-03 any information submitted to the Ohio EPA pursuant to these permits may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission by stamping words "confidential business information" on each page containing such information. If no claim is made at the time of submission, the Ohio EPA may make the information available to the public without further notice. If a claim is asserted, documentation for the claim must be tendered and the validity of the claim will be assessed in accordance with the procedures in OAC Rule 3745-34-03. If the documentation for the claim of confidentiality is not received, the Ohio EPA may deny the claim without further inquiry. Claims of confidentiality for the following information will be denied:

1. The name and address of the permittee;

2. Information which deals with the existence, absence or level of contaminants in receiving water.

E. DUTIES AND REQUIREMENTS (OAC RULE 3745-34-26)

1. Duty to Comply. The permittee shall comply with all applicable UIC regulations and conditions of these permits, issued in accordance with OAC Rule 3745-34-19. Any permit noncompliance constitutes a violation of ORC Chapter 6109. or 6111. and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application. Such noncompliance also may be grounds for enforcement action under other applicable state and federal law.

2. Penalties for Violations of Permit Conditions. Any person who violates a permit requirement is subject to injunctive relief, civil penalties, fines and/or other enforcement action under ORC Chapters 6111., 6109., or 3734. Any person who knowingly or recklessly violates permit conditions may be subject to criminal prosecution.

3. Continuation of Expiring Permits.
Duty to Reapply. If the permittee wishes to continue an activity regulated by these permits after the expiration date of these permits, the permittee shall

submit a complete application for new permits at least 180 days before expiration of these permits.

4. Need to Halt or Reduce Activity Not a Defense. It shall not be a defense, for a permittee in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of these permits.

5. Duty to Mitigate. The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit.

6. Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of these permits. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of these permits.

7. Duty to Provide Information. The permittee shall furnish to the Director, within a time specified, any information which the Director may request in order to determine whether cause exists for renewing, modifying, revoking and reissuing, or terminating these permits. To determine compliance with these permits, or to issue new permits the permittee shall furnish to the Director, upon request, copies of all records required to be kept by these permits.

8. Inspection and Entry. The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law to:

   a. Enter permittee's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of these permits;

   b. Have access at reasonable times to and copy any records that are kept under the conditions of these permits;

   c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under these permits; and

d. Sample or monitor at reasonable times for the purposes of assuring permit compliance or as otherwise authorized by ORC Chapter 6111. and OAC Chapter 3745-34, any substances or parameters at any location.

9. Records.

a. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all reports required by these permits for a period of at least five (5) years from the date of the sample, measurement or report or for the duration of the permitted life of the wells, whichever is longer.

b. The permittee shall maintain records of all data required to complete the permit application forms for permits and any supplemental information submitted under OAC Rule 3745-34-16 for a period of at least five (5) years from the date the applications were signed. These periods may be extended by request of the Director during that period of time.

c. The permittee shall retain records concerning the nature and composition of all injected fluids for three (3) years after the project has been completed.

d. The permittee shall continue to retain such records after the retention period specified by paragraphs (a) to (c) above, unless he delivers the records to the Director or obtains written approval from the Director to discard the records.

e. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

f. Records of monitoring information shall include the following as applicable pursuant to OAC Rule 3745-34-26(J)(3):

i. The date, exact place, and time of sampling or measurements;

ii. The name(s) of the individual(s) who performed the sampling or measurements;

iii. A precise description of sampling methodology;

iv. The date(s) analyses or measurements were performed;

v. The name(s) of the individual(s) who performed the analyses or measurements and the laboratory that performed the analyses ormeasurements;

vi. The analytical techniques or methods used; and

vii. All results of such analyses.

10. Signatory Requirements. All reports or other information, required to be submitted by these permits or requested by the Director, shall be signed and certified in accordance with OAC Rule 3745-34-17.

11. Reporting Requirements.

a. Planned Changes. The permittee shall give written notice to the Director, as soon as possible, of any planned physical alterations or additions to the permitted facility. Within ten (10) days of the verbal notification, or of the commencement of construction, the permittee shall give written notice to the Director with justification of any planned physical alterations to the permitted well(s).

b. Anticipated Noncompliance. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

c. Compliance Schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of these permits shall be submitted no later than thirty (30) days following each schedule date.

d. Twenty-four (24) Hour Reporting.

1. The permittee shall report to the Director any noncompliance which may endanger health or the environment. Appropriate information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which must be reported orally within 24 hours:

I. Any monitoring or other information which indicates that any contaminant may cause an endangerment to an underground source of drinking water.

ii. Any noncompliance with a permit condition, or malfunction of the injection system, which may cause unpermitted fluid migration into or between underground sources of drinking water.

2. A written submission also shall be provided within five (5) business days of the time the permittee becomes aware of the circumstances of such noncompliance. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, the anticipated time it is expected to continue; and if the noncompliance has or has not been corrected, and steps taken or

planned to reduce, eliminate and prevent recurrence of the noncompliance.

e. Other Noncompliance. The permittee shall report all other instances of noncompliance not otherwise reported at the time monitoring reports are submitted. The reports shall contain the information listed in permit condition 11(d)(2) above.

f. Other Information. When the permittee becomes aware of failure to submit any relevant facts in the permit applications or that incorrect information was submitted in a permit application or in any report to the Director, the permittee shall submit such facts and corrected information within ten (10) days.

g. The Director shall be notified immediately, in writing, if the person responsible for certification of documents pursuant to OAC Rule 3745-34-17 is changed.

F. PLUGGING AND ABANDONMENT

1. Plan for Plugging and Abandonment. Before any well installed pursuant to this permit is taken out of service, the permittee shall submit to the Ohio Environmental Protection Agency a plan for the plugging and abandonment of such well. The required plan shall specify procedures and contain such other provisions as are necessary to ensure that no movement of fluids into an underground source of drinking water is allowed. After review and acceptance of this plan by the Ohio Environmental Protection Agency, that plan shall automatically become a condition of this permit.

2. Abandonment Requirements. Injection wells declared as temporarily abandoned shall be maintained in strict compliance with Rule 3745-9-09 of the OAC to ensure that the well will not endanger underground sources of drinking water during the period of temporary abandonment. Injection wells declared as permanently abandoned shall be plugged in accordance with Rule 3745-9-10(C) of the OAC.

3. Plugging Report. Within 30 days after plugging the well, the permittee shall submit a plugging report to the Director. The report shall be certified as accurate by the person who performed the plugging operation and shall contain a statement defining the plugging procedure.

G. CORRECTIVE ACTION

1. Should routine monitoring or any other information indicate that primary drinking water standards as defined in Chapter 3745-81 of the OAC are, or may be, exceeded in any underground source of drinking water beyond the property boundary, or any monitored or other parameters are being significantly degraded in underground sources of drinking water not permitted for underground injection and as a consequence of the injection well operation, the permittee shall develop a corrective action plan. Such plan must include a determination of the nature, rate, and extent of the degradation. The plan may also be required to include appropriate remedial actions such as: additional chemical treatment, discontinuance of injection operations and/or others yet to be determined.

2. The plan for corrective action shall be submitted to the Director within 30 days of the date that indications of a violation of Chapter 3745-81 are noted, and are subject to approval by the Ohio EPA prior to implementation.

PART II
SPECIAL CONDITIONS

A. WELL CONSTRUCTION AND COMPLETION

All well construction and operations shall be conducted in accordance with the specifications submitted with the applications for this permit. Activities conducted under this permit include, but are not limited to, the following:

Injection Well Installation.

Up to ten (10) injection wells shall be drilled/installed to a depth of approximately 80 feet with the well screen interval extending from a depth of approximately 20 feet to 80 feet. Drilling and construction shall be supervised by a knowledgeable hydrogeologist or engineer representing the facility.

B. WELL OPERATION

1. Injection Zone. The injection zone is the Upper Great Miami Buried Valley Aquifer.

2. Injectate Quality Limits. Injectate shall be comprised of extracted ground water amended with sodium lactate. Constituents present in reinjected ground water shall not exceed the following limits:

1,1,1-Trichloroethane	0.710 mg/l
1,1-Dichloroethene	0.126 mg/l
1,2-Dichloroethane	0.114 mg/l
Carbon Tetratchloride	0.114 mg/l
Cis-1, 2-Dichloroethene	1.050 mg/l
Tetrachloroethene	1.913 mg/l
Trichloroethene	5.381 mg/l
Vinyl Chloride	0.114 mg/l

If at any time analyses indicate that the constituent limits established for reinjected ground water have been exceeded, the Director shall require that the permittee take corrective actions to bring the injected fluids back within the limits established in these permits. Further injection will be prohibited until the permittee adequately demonstrates that the exceedance has been corrected.

3. Injection Rate.

The maximum injection rate per well shall not exceed 100 gallons per minute (gpm).

C. MONITORING

1. Injected Fluids. To be monitored:

   a. Daily for average rate and injection volume; reported monthly;

   b. Monthly for 1,1,1-Trichloroethane; 1,1-Dichloroethene; 1,2-Dichloroethane; Carbon Tetratchloride; Cis-1, 2-Dichloroethene; Tetrachloroethene; Trichloroethene; and Vinyl Chloride; reported monthly;

   c. Quarterly for 1,2-Dichloropropane and 1,1,2-Trichloroethane; reported quarterly.

   d. Annually for Antimony; Arsenic; Barium; Cadmium; Chromium; Cyanide; Lead; Mercury; and Selenium; reported annually.

D. REPORTING

The permittee shall submit monitoring reports to the Ohio EPA, Division of Drinking and Ground Waters, Underground Injection Control Unit by the 15th day of the month following each month that monitoring results are required in accordance with schedules described in Part II(B) of this permit at the following address:

Ohio EPA
Division of Drinking and Ground Waters
Underground Injection Control Unit
Lazarus Government Center
122 South Front Street
P.O. Box 1049
Columbus, Ohio 43216-1049

Reports shall contain information regarding types of tests and methods used to generate monitoring data, as specified in Part I(E)(10) of this permit.

E. AGENCY INVOLVEMENT

Personnel from the Ohio EPA have unrestricted right of entry to the wells, as detailed in Part I (E)(8) of this permit.

F. GENERAL

The wells shall be constructed in such a manner that prevents the movement of the injectate of any fluid into any underground source of drinking water if the injectate or fluid may cause of violation of any primary drinking water rule under Chapter 3745-81 of the Ohio Administrative Code not included in this permitted remediation project or may otherwise adversely affect the health of persons.

Issuance of these permits presumes compliance on the part of the permittee with all applicable sections of OAC Rules 3745-34-26, 3745-34-27, all parts of OAC Rule 3745-34-20, effect of a Permit, and Chapter 6111. of the Ohio Revised Code.

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OhioEPA
State of Ohio Environmental Protection Agency

STREET ADDRESS:
Lazarus Government Center
122 S. Front Street
Columbus, Ohio 43215

TELE: (614) 644-3020 FAX: (614) 644-3184

MAILING ADDRESS:
P.O. Box 1049
Columbus, OH 43216-1049

April 8, 2004

Re: OEPA PTI No. 05-12785
Facility Name: Behr Dayton Thermal Products

Behr Dayton Thermal Products
1600 Webster Street
Dayton, OH 45404

Ladies and Gentlemen:

Transmitted herewith is one copy of the Public Notice and Draft Permit to Install in the above-referenced matter

The public has been invited to review the support documentation and submit comments regarding this draft Permit to Install. Comments on the draft action shall be responded to in writing by the Ohio Environmental Protection Agency.

The Permit to Install as drafted will be issued as a final action unless the director revises the permit after consideration of all written comments received during the 30-day period following Public Notice and Consideration of the record of a public meeting, if one is held, or unless the draft is disapproved by the Regional Administrator, U.S. Environmental Protection Agency.

You should note that a general condition of your permit states that issuance of a Permit to Install does not relieve you of the duty of complying with all applicable Federal, State, and local laws, ordinances, and regulations.

Sincerely,

Patti L. Smith

Patti L. Smith, Supervisor
Permit Processing Unit
Division of Surface Water

PLS/dks

Enclosure

CERTIFIED MAIL

DAIMLERCHRYSLER DOCUMENT CONTROL NO.
SC001.04142004.001

Ohio Environmental Protection Agency

Permit to Install

Application No: 05-12785

Applicant Name: Behr Dayton Thermal Products
Address: 1600 Webster Street
City: Dayton
State: OH, 45404

Person to Contact: Rob Stenson
Telephone: 937-458-8711

Description of Proposed Source: Groundwater Remediation System for Behr Dayton Thermal Products at 1600 Webster Street, Dayton, Montgomery County

Issuance Date:
Effective Date:

The above named entity is hereby granted a permit to install for the above described source pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described source of environmental pollutants will operate in compliance with applicable state and federal laws and regulations. Issuance of this permit does not constitute expressed or implied assurance that, if constructed or modified in accordance with those plans and specifications, the above described source of pollutants will be granted the necessary operating permits. This permit is granted subject to the following conditions attached hereto.

In accordance with the antidegradation rule, OAC 3745-1-05, I have determined that a lowering of water quality in the Great Miami River is necessary. Provision (D)(1)(d) was applied to this application. This provision excludes the need for the submittal and subsequent review of technical alternatives and social and economic issues related to the degradation. Other rule provisions, however, including public participation and appropriate intergovernmental coordination were required and considered prior to reaching this decision.

Ohio Environmental Protection Agency

_____

Christopher Jones
Director
P. O. Box 1049,
122 South Front Street
Columbus, OH 43216-1049

This permit shall expire if construction has not been initiated by the applicant within eighteen months of the effective date of this permit. By accepting this permit, the applicant acknowledges that this eighteen month period shall not be considered or construed as extending or having any effect whatsoever on any compliance schedule or deadline set forth in any administrative or court order issued to or binding upon the permit applicant, and the applicant shall abide by such compliance schedules or deadlines to avoid the initiation of additional legal action by the Ohio EPA.

The director of the Ohio Environmental Protection Agency, or his authorized representatives, may enter upon the premises of the above named applicant during construction and operation at any reasonable time for the purpose of making inspections, conducting tests, examining records, or reports pertaining to the construction, modification, or installation of the above described source of environmental pollutants.

Issuance of this permit does not relieve you of the duty of complying with all applicable federal, state, and local laws, ordinances, and regulations.

Any well, well point, pit, or other device installed for the purpose of lowering the ground water level to facilitate construction of this project shall be properly abandoned in accordance with the provisions of this plan or as directed by the director or his representative.

Any person installing any well, well point, pit or other device used for the purpose of removing ground water from an aquifer shall complete and file a Well Log and Drilling Report form with the Ohio Department of Natural Resources, Division of Water, within 30 days of the well completion in accordance with the Ohio Revised code Section 1521.01 and 1521.05. In addition, any such facility that has a capacity to withdraw waters of the state in an amount greater than 100,000 gallons per day from all sources shall be registered by the owner with the chief of the Division of Water, Ohio Department of Natural Resources, within three months after the facility is completed in accordance with Section 1521.16 of the Ohio Revised Code. For copies of the necessary well log, drilling report, or registration forms, please contact:

Ohio Department of Natural Resources
Fountain Square
Columbus, OH 43224-1387
(614) 265-6717

The proposed wastewater disposal system shall be constructed in strict accordance with the plans and application approved by the director of the Ohio Environmental Protection Agency. There shall be no deviation from these plans without the prior express, written approval of the agency. Any deviations from these plans or the above conditions may lead to such sanctions and penalties as provided for under Ohio law. Approval of this plan and issuance of this permit does not constitute an assurance by the Ohio Environmental Protection Agency that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources are inadequate or cannot meet applicable standards.

No liquids, sludges, or toxic or hazardous substances other than those set forth in the approved permit shall be accepted for disposal without the prior written approval of the Ohio Environmental Protection Agency.

Sewer and manhole construction joints shall conform to standards of the Ohio Environmental Protection Agency.

MONTGOMERY

PUBLIC NOTICE

THE FOLLOWING APPLICATIONS AND/OR VERIFIED COMPLAINTS WERE RECEIVED, AND THE FOLLOWING DRAFT, PROPOSED, OR FINAL ACTIONS WERE ISSUED, BY THE OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA) LAST WEEK. "ACTIONS" INCLUDE THE ADOPTION, MODIFICATION, OR REPEAL OF ORDERS (OTHER THAN EMERGENCY ORDERS); THE ISSUANCE, DENIAL, MODIFICATION OR REVOCATION OF LICENSES, PERMITS, LEASES, VARIANCES, OR CERTIFICATES; AND THE APPROVAL OR DISAPPROVAL OF PLANS AND SPECIFICATIONS. "DRAFT ACTIONS" ARE WRITTEN STATEMENTS OF THE DIRECTOR OF ENVIRONMENTAL PROTECTION'S (DIRECTOR'S) INTENT WITH RESPECT TO THE ISSUANCE, DENIAL, ETC. OF A PERMIT, LICENSE, ORDER, ETC. INTERESTED PERSONS MAY SUBMIT WRITTEN COMMENTS OR REQUEST A PUBLIC MEETING REGARDING DRAFT ACTIONS. COMMENTS OR PUBLIC MEETING REQUESTS MUST BE SUBMITTED WITHIN 30 DAYS OF NOTICE OF THE DRAFT ACTION. "PROPOSED ACTIONS" ARE WRITTEN STATEMENTS OF THE DIRECTOR'S INTENT WITH RESPECT TO THE ISSUANCE, DENIAL, MODIFICATION, REVOCATION, OR RENEWAL OF A PERMIT, LICENSE, OR VARIANCE. WRITTEN COMMENTS AND REQUESTS FOR A PUBLIC MEETING REGARDING A PROPOSED ACTION MAY BE SUBMITTED WITHIN 30 DAYS OF NOTICE OF THE PROPOSED ACTION. AN ADJUDICATION HEARING MAY BE HELD ON A PROPOSED ACTION IF A HEARING REQUEST OR OBJECTION IS RECEIVED BY THE OEPA WITHIN 30 DAYS OF ISSUANCE OF THE PROPOSED ACTION. WRITTEN COMMENTS, REQUESTS FOR PUBLIC MEETINGS, AND ADJUDICATION HEARING REQUESTS MUST BE SENT TO: HEARING CLERK, OHIO ENVIRONMENTAL PROTECTION AGENCY, P.O. BOX 1049, COLUMBUS, OHIO 43216-1049 (TELEPHONE: 614-644-2129). "FINAL ACTIONS: ARE ACTIONS OF THE DIRECTOR WHICH ARE EFFECTIVE UPON ISSUANCE OR A STATED EFFECTIVE DATE. PURSUANT TO OHIO REVISED CODE SECTION 3745.04, A FINAL ACTION MAY BE APPEALED TO THE ENVIRONMENTAL REVIEW APPEALS COMMISSION (ERAC) (FORMERLY KNOWN AS THE ENVIRONMENTAL BOARD OF REVIEW) BY A PERSON WHO WAS A PARTY TO A PROCEEDING BEFORE THE DIRECTOR BY FILING AN APPEAL WITHIN 30 DAYS OF NOTICE OF THE FINAL ACTION. PURSUANT TO OHIO REVISED CODE SECTION 3745.07, A FINAL ACTION ISSUING, DENYING, MODIFYING, REVOKING, OR RENEWING A PERMIT, LICENSE, OR VARIANCE WHICH IS NOT PRECEDED BY A PROPOSED ACTION, MAY BE APPEALED TO THE ERAC BY FILING AN APPEAL WITHIN 30 DAYS OF ISSUANCE OF THE FINAL ACTION. ERAC APPEALS MUST BE FILED WITH: ENVIRONMENTAL REVIEW APPEALS COMMISSION, 309 SOUTH FOURTH STREET, ROOM 222, COLUMBUS, OHIO 43215. A COPY OF THE APPEAL MUST BE SERVED ON THE DIRECTOR WITHIN 3 DAYS AFTER FILING THE APPEAL WITH THE ERAC.

DRAFT PERMIT TO INSTALL - SUBJECT TO REVISION

BEHR DAYTON THERMAL PRODUCTS LLC
1600 WEBSTER STREET
DAYTON OH ISSUE DATE 04/15/2004
APPLICATION NO(S) 05-12785
ANTIDEGRADATION PROJECT AS DEFINED BY OAC 3745-1-05 - AN EXCLUSION OR WAIVER IS APPLICABLE. REQUESTS TO BE ON THE INTERESTED PARTIES MAILING LIST SHOULD BE SUBMITTED WITHIN 30 DAYS.

OhioEPA
State of Ohio Environmental Protection Agency

STREET ADDRESS:
Lazarus Government Center
122 S. Front Street
Columbus, Ohio 43215

TELE: (614) 644-3020 FAX: (614) 644-3184

MAILING ADDRESS:
P.O. Box 1049
Columbus, OH 43216-1049

April 8, 2004

Re: Ohio EPA Permit No.: 1IN00089*ED
Facility Name: Behr Dayton Thermal Products

Behr Dayton Thermal Products
1600 Webster Street
Dayton, Ohio 45404

Ladies and Gentlemen:

Transmitted herewith is one copy of the Public Notice and Proposed Modification to the above referenced permit.

The public has been invited to submit comments regarding this proposed modification. If sufficient public interest is indicated, a public meeting will be held.

All written comments received during the 30-day period following the date of public notice and the public meeting record, if a public meeting is held, will be considered. This proposed modification will take effect on the date indicated unless an adjudication hearing is requested by you or by an aggrieved or adversely affected party.

If you wish to challenge this proposed action, you may request an adjudication hearing within thirty (30) days of the mailing of this proposed action, as provided by Section 3745.07 of the Ohio Revised Code. Since all other conditions of the permit remain in effect, a hearing may not be requested on any issues other than the proposed modification. If an adjudication hearing is requested, the existing NPDES permit will remain in effect until the hearing is resolved. At an adjudication hearing, you may appear in person or be represented by an attorney, or other such representative as is permitted to practice before this agency, or you may present your position, arguments, or contentions in writing. At an adjudication hearing, you may also present evidence and examine witnesses appearing for and against you. Requests for hearing shall specify the issues of fact and law to be contested. Any such request for hearing must be sent to the Hearing Clerk, Ohio EPA, at the same address shown above.

The director may withdraw this proposed modification at any time before it takes effect. He may also issue a revised proposed modification. If you have any questions, please contact the Ohio EPA district office in your area.

Sincerely,

Patti L. Smith

Patti L. Smith, Supervisor
Permit Processing Unit
Division of Surface Water

PLS/dks

CERTIFIED MAIL

Application No.: OH0009199

OEPA Permit No.: 1IN00089*ED

Public Notice No.: 04-04-020M

The following statements apply to the modification.

On the basis of preliminary staff review and application of standards and regulations, the Director of the Ohio Environmental Protection Agency has issued a proposed modification for the aforementioned discharge subject to certain effluent conditions and special conditions. The proposed modification is tentative but shall become final on the effective date unless: 1) an adjudication hearing is requested, 2) the Director withdraws and revises the proposed modification after consideration of the record of a public meeting, written comments, or statements, or 3) upon disapproval by the administrator of the U.S. Environmental Protection Agency.

Within thirty days of publication of this notice, any person may submit written comments, a statement as to why the proposed modification should be changed, a request for a public meeting on the proposed modification, and/or a request for notice of further actions concerning the modification. All communications timely received will be considered in the final formulation of the modification. If significant public interest is shown, a public meeting will be held prior to finalization of the modification.

Within 30 days of the issuance of the proposed modification, any officer or an agency of the state or of a political subdivision, acting in his representative capacity or any person aggrieved or adversely affected by issuance of it may request an adjudication hearing by submitting a written objection in accordance with Ohio Revised Code Section 3745.07. Following the finalization of the modification by the Director, any person who was a party to an adjudication hearing may appeal to the Environmental Review Appeals Commission.

All comments or statements on the proposed modification and all requests for notice of further actions should be submitted in person or by mail to: Ohio Environmental Protection Agency, Division of Surface Water, Lazarus Government Center, Permits Processing Unit, 122 South Front Street, P. O. Box 1049, Columbus, Ohio 43216-1049. Applications, fact sheets, proposed permits including proposed effluent limitations, special conditions, comments received, and other documents are available for inspection and may be copied at a cost of 5 cents per page at the Ohio Environmental Protection Agency at the above address any time between the hours of 8 a.m. and 4:30 p.m., Monday through Friday. Copies of public notices are available at no charge at the same address.

Requests for, and communications concerning, adjudication hearings and public meetings should be addressed to: Legal Records Section, Ohio Environmental Protection Agency, Lazarus Government Center, 122 South Front Street, P. O. Box 1049, Columbus, Ohio 43266-0149, (614) 644-2115.

All communications should specify the OEPA permit number and public notice number.

Mailing lists are maintained for persons or groups who desire to receive public notice of proposed and final actions taken on applications for dischargers located in the state or in certain geographical areas. Persons or groups may have their names put on such a list by making a written request to the Permits Processing Unit. Persons or groups may also request copies of fact sheets, applications, or other documents pertaining to a specific application.

Ohio Environmental Protection Agency
Modification of National Pollutant Discharge Elimination System (NPDES) Permit

Issue Date: April 8, 2004 Existing Permit No.: 1IN00089*DD

"PROPOSED"

Effective Date: Application No.: OH0009199

Entity Name: Behr Dayton Thermal Products

Facility Location: 1600 Webster Street, Dayton, Ohio, Montgomery County

In accordance with Rule 3745-33-04 (D) of the Ohio Administrative Code, the above referenced NPDES permit is hereby modified as follows:

Revision

Add director's decision statment on page 1; add reporting codes 03864 - 1,2-Cis - Dichloroethene, 34506 - 1,1,1-Trichlorethane, 39175 - Vinal Chloride, 39180- Trichlorethylene, 61162 - 1,1,-Dichloroethene and 78389 - Tetrachloroethene with limits and loadings, and add "Loadings calculated based on 0.288 mgd flow" to notes section for outfall 1IN00089002.

Attached is the modified NPDES permit.

All terms and conditions of the existing permit not recommended for modification by this document will remain in effect. Any modified term or condition contained in this modification shall supersede, on the date this modification is effective, the existing respective term or condition of the permit.

When the modification is effective, the Ohio EPA permit number will be changed to 1IN00089*ED. The application number will remain OH0009199.

Christopher Jones
Director

Application No. OH0009199

Modification Issue Date: April 8, 2004

Modification Effective Date: "PROPOSED"

Expiration Date: September 30, 2006

Ohio Environmental Protection Agency
Authorization to Discharge Under the
National Pollutant Discharge Elimination System

In compliance with the provisions of the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et. seq., hereinafter referred to as the "Act"), and the Ohio Water Pollution Control Act (Ohio Revised Code Section 6111),

Behr
Dayton Thermal Products

is authorized by the Ohio Environmental Protection Agency, hereinafter referred to as "Ohio EPA," to discharge from the Dayton Thermal Products wastewater treatment works located at 1600 Webster Street, Dayton, Ohio, Montgomery County and discharging to The Great Miami River via storm sewer in accordance with the conditions specified in Parts I, II, III, IV, V, and VI of this permit.

In accordance with the antidegradation rule, OAC 3745-1-05, I have determined that a lowering of water quality in the Great Miami River is necessary. Provision (D)(1)(d) was applied to this application. This provision excludes the need for the submittal and subsequent review of technical alternatives and social and economic issues related to the degradation. Other rule provisions, however, including public participation and appropriate intergovernmental coordination were required and considered prior to reaching this decision.

This permit is conditioned upon payment of applicable fees as required by Section 3745.11 of the Ohio Revised Code.

This permit and the authorization to discharge shall expire at midnight on the expiration date shown above. In order to receive authorization to discharge beyond the above date of expiration, the permittee shall submit such information and forms as are required by the Ohio EPA no later than 180 days prior to the above date of expiration.

Christopher Jones
Director

Total Pages: 28

Part I, A. - FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from outfall 1IN00089001. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

Table - Final Outfall - 001 - Final

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
	Concentration Specified Units				Loading* kg/day					
Parameter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly	Measuring Frequency	Sampling Type	Monitoring Months
00010 - Water Temperature - C	-	-	-	-	-	-	-	1 / 2 Weeks	Continuous	All
50050 - Flow Rate - MGD	-	-	-	-	-	-	-	1/Day	24hr Total	All
61941 - pH, Maximum - S.U.	9.0	-	-	-	-	-	-	1 / 2 Weeks	Grab	All
61942 - pH, Minimum - S.U.	-	6.5	-	-	-	-	-	1 / 2 Weeks	Grab	All

Notes for Station Number 1IN00089001:

This discharge is limited to non-contact cooling water and storm runoff; it is to be free of process wastes and other contaminants.

Sampling shall be performed when discharging. If NO DISCHARGE OCCURS DURING THE ENTIRE MONTH, report "AL" in the first column of the first day of the month on the 4500 Form (Monthly Operating Report). A signature is still required.

Use of a maximum indicating thermometer for temperature is acceptable.

Part I, A. FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from outfall 1IN00089002. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

Table - Final Outfall - 002 - Final

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
	Concentration Specified Units				Loading* kg/day					
Parameter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly	Measuring Frequency	Sampling Type	Monitoring Months
00010 - Water Temperature - C	-	-	-	-	-	-	-	1 / 2 Weeks	Continuous	All
00530 - Total Suspended Solids - mg/l	45	-	-	30	-	-	-	1/Month	24hr Composite	All
03864 - 1,2-Cis-Dichloroethene - ug/l	5.0	-	-	-	0.0054	-	-	1/Month	Grab	All
34506 - 1,1,1-Trichloroethane - ug/l	5.0	-	-	-	0.0054	-	-	1/Month	Grab	All
39175 - Vinyl Chloride - ug/l	5.0	-	-	-	0.0054	-	-	1/Month	Grab	All
39180 - Trichloroethylene - ug/l	5.0	-	-	-	0.054	-	-	1/Month	Grab	All
50050 - Flow Rate - MGD	-	-	-	-	-	-	-	1/Day	24hr Total	All
61162 - 1,1-Dichloroethene - ug/l	5.0	-	-	-	0.0054	-	-	1/Month	Grab	All
61941 - pH, Maximum - S.U.	9.0	-	-	-	-	-	-	1/Month	Grab	All
61942 - pH, Minimum - S.U.	-	6.5	-	-	-	-	-	1/Month	Grab	All
78389 - Tetrachloroethene - ug/l	5.0	-	-	-	0.0054	-	-	1/Month	Grab	All

Notes for Station Number 1IN00089002:

Loadings calculated based on 0.288 mgd flow.
This discharge is limited to non-contact cooling water, cooling tower blowdown, storm water runoff, and treated groundwater remediation water; it is to be free of other process wastes and other contaminants.
Sampling shall be performed when discharging. If NO DISCHARGE OCCURS DURING THE ENTIRE MONTH, report "AL" in the first column of the first day of the month on the 4500 Form (Monthly Operating Report). A signature is still required.
Use of a maximum indicating thermometer for temperature is acceptable.

Part I, A. - FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from outfall 1IN00089003. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

Table - Final Outfall - 003 - Final

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
	Concentration Specified Units				Loading* kg/day					
Parameter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly	Measuring Frequency	Sampling Type	Monitoring Months
00010 - Water Temperature - C	-	-	-	-	-	-	-	1 / 2 Weeks	Continuous	All
50050 - Flow Rate - MGD	-	-	-	-	-	-	-	1/Day	24hr Total	All
61941 - pH, Maximum - S.U.	9.0	-	-	-	-	-	-	1 / 2 Weeks	Grab	All
61942 - pH, Minimum - S.U.	-	6.5	-	-	-	-	-	1 / 2 Weeks	Grab	All

Notes for Station Number 1IN00089003:

This discharge is limited to non-contact cooling water and storm runoff; it is to be free of process wastes and other contaminants.

Sampling shall be performed when discharging. If NO DISCHARGE OCCURS DURING THE ENTIRE MONTH, report "AL" in the first column of the first day of the month on the 4500 Form (Monthly Operating Report). A signature is still required.

Use of a maximum indicating thermometer for temperature is acceptable.

Part II, OTHER REQUIREMENTS

A. Description of the location of the required sampling stations are as follows:

Sampling Station	Description of Location
1IN00089001	At manhole adjacent to Leo Street prior to discharge to city storm sewer (Lat: 39 47' 12"; Long: 84 10' 50")
1IN00089002	At manhole adjacent to Webster Street prior to discharge to city storm sewer (Lat: 39 47' 05": Long: 84 10' 50")
1IN00089003	At manhole adjacent to Leo Street prior to discharge to city storm sewer (Lat: 39 46' 58:; Long: 84 10' 50")

B. This permit shall be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the Clean Water Act, if the effluent standard or limitation so issued or approved.

1. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
2. Controls any pollutant not limited in the permit.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Act then applicable.

C. All parameters, except flow, need not be monitored on days when the plant is not normally staffed (Saturdays, Sundays, and Holidays). On those days, report "AN" on the monthly report form.

D. In the event that the permittee's operation requires the use of cooling or boiler water treatment additives that are discharged to surface waters of the state, written permission must be obtained from the director of the Ohio EPA prior to use. Reporting and testing requirements to apply for permission to use additives can be obtained from the Ohio EPA, Central Office, Division of Surface Water, Water Resources Management Section. Reported information will be used to evaluate whether the use of the additive(s) at concentrations expected in the final discharge will be harmful or inimical to aquatic life.

PART III - GENERAL CONDITIONS

1.□DEFINITIONS

"Daily load" is the total discharge by weight during any calendar day. If only one sample is taken during a day, the weight of pollutant discharge calculated from it is the daily load.

"Daily concentration" means the arithmetic average of all the determinations of concentration made during the day. If only one sample is taken during the day, its concentration is the daily concentration. Coliform bacteria limitations compliance shall be determined using the geometric mean.

"Weekly load" is the total discharge by weight during any 7-day period divided by the number of days in that 7-day period that the facility was in operation. If only one sample is taken in a 7-day period, the weight of pollutant discharge calculated from it is the 7-day load. If more than one sample is taken during the 7-day period, the 7-day load is calculated by determining the daily load for each day sampled, totaling the daily loads for the 7-day period, and dividing by the number of days sampled.

"Weekly concentration" means the arithmetic average of all the determinations of daily concentration limitation made during the 7-day period. If only one sample is taken during the 7-day period, its concentration is the 7-day concentration for that 7-day period. Coliform bacteria limitations compliance shall be determined using the geometric mean.

"Monthly load" is the total discharge by weight during all days in a calander month divided by the number of days that the facility was in operation during that month. If only one sample is taken during the month the weight of pollutant discharge calculated from it is the monthly load. If more than one sample is taken during the month, the monthly load is calculated by determining the daily load for each day sampled, totaling the daily loads for the month and dividing by the number of days sampled.

"Monthly concentration" means the arithmetic average of all the determinations of daily concentration made during any calender month. If only one sample is taken during the month, its concentration is the monthly concentration for that period. Coliform bacteria limitations compliance shall be determined using the geometric mean.

"85 percent removal" means the arithmetic mean of the values for effluent samples collected in a period of 30 consecutive days shall not exceed 15 percent of the arithmetic mean of the values for influent samples collected at approximately the same times during the same period.

"Absolute Limitations" Compliance with limitations having descriptions of "shall not be less than," "nor greater than," "shall not exceed," "minimum," or "maximum" shall be determined from any single value for effluent samples and/or measurements collected.

"Net concentration" shall mean the difference between the concentration of a given substance in a sample taken of the discharge and the concentration of the same substances in a sample taken at the intake which supplies water to the given process. For the purpose of this definition, samples that are taken to determine the net concentration shall always be 24-hour composite samples made up of at least six increments taken at regular intervals throughout the plant day.

"Net load" shall mean the difference between the load of a given substance as calculated from a sample taken of the discharge and the load of the same substance in a sample taken at the intake which supplies water to given process. For purposes of this definition, samples that are taken to determine the net Loading shall always be 24-hour composite samples made up of at least six increments taken at regular intervals throughout the plant day.

"MGD" means million gallons per day.

"mg/l" means milligrams per liter.

'ug/l" means micrograms per liter.

"ng/l" means nanograms per liter.

"S.U." means standard pH unit.

' kg/day" means kilograms per day.

"Reporting Code" is a five digit number used by the Ohio EPA in processing reported data. The reporting code does not imply the type of analysis used nor the sampling techniques employed.

"Quarterly (1/Quarter) sampling frequency" means the sampling shall be done in the months of March, June, August, and December, unless specificially identified otherwise in the Effluent Limitations and Monitoring Requirements table.

"Yearly (1/Year) sampling frequency" means the sampling shall be done in the month of September, unless specificially identified otherwise in the effluent limitations and monitoring requirements table.

"Semi-annual (2/Year) sampling frequency" means the sampling shall be done during the months of June and December, unless specificially identified otherwise.

"Winter" shall be considered to be the period from November 1 through April 30.

"Bypass" means the intentional diversion of waste streams from any portion of the treatment facility.

'Summer" shall be considered to be the period from May 1 through October 31.

"Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

'Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

2. GENERAL EFFLUENT LIMITATIONS

The effluent shall, at all times, be free of substances:

A. In amounts that will settle to form putrescent, or otherwise objectionable, sludge deposits; or that will adversely affect aquatic life or water fowl;

B. Of an oily, greasy, or surface-active nature, and of other floating debris, in amounts that will form noticeable accumulations of scum, foam or sheen;

C. In amounts that will alter the natural color or odor of the receiving water to such degree as to create a nuisance;

D. In amounts that either singly or in combination with other substances are toxic to human, animal, or aquatic life;

E. In amounts that are conducive to the growth of aquatic weeds or algae to the extent that such growths become inimical to more desirable forms of aquatic life, or create conditions that are unsightly, or constitute a nuisance in any other fashion;

F. In amounts that will impair designated instream or downstream water uses.

3. FACILITY OPERATION AND QUALITY CONTROL

All wastewater treatment works shall be operated in a manner consistent with the following:

A. At all times, the permittee shall maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee necessary to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with conditions of the permit.

B. The permittee shall effectively monitor the operation and efficiency of treatment and control facilities and the quantity and quality of the treated discharge.

C. Maintenance of wastewater treatment works that results in degradation of effluent quality shall be scheduled during non-critical water quality periods and shall be carried out in a manner approved by Ohio EPA as specified in the Paragraph in the PART III entitled, "UNAUTHORIZED DISCHARGES".

4. REPORTING

A. Monitoring data required by this permit may be submitted in hardcopy format on the Ohio EPA 4500 report form pre-printed by Ohio EPA or an approved facsimile. Ohio EPA 4500 report forms for each individual sampling station are to be received no later than the 15th day of the month following the month-of-interest. The original report form must be signed and mailed to:

Ohio Environmental Protection Agency
Lazarus Government Center
Division of Surface Water
Enforcement Section ES/MOR
P.O. Box 1049
Columbus, Ohio 43216-1049

Monitoring data may also be submitted electronically using Ohio EPA developed SWIMware software. Data must be transmitted to Ohio EPA via electronic mail or the bulletin board system by the 20th day of the month following the month-of-interest. A Surface Water Information Management System (SWIMS) Memorandum of Agreement (MOA) must be signed by the responsible official and submitted to Ohio EPA to receive an authorized Personal Identification Number (PIN) prior to sending data electronically. A hardcopy of the Ohio EPA 4500 form must be generated via SWIMware, signed and maintained onsite for records retention purposes.

B. If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified below, the results of such monitoring shall be included in the calculation and reporting of the values required in the reports specified above.

C. Analyses of pollutants not required by this permit, except as noted in the preceding paragraph, shall not be reported on Ohio EPA report form (4500) but records shall be retained as specified in the paragraph entitled "RECORDS RETENTION".

5. SAMPLING AND ANALYTICAL METHOD

Samples and measurements taken as required herein shall be representative of the volume and nature monitored flow. Test procedures for the analysis of pollutants shall conform to regulation 40 CFR 136, "Test Procedures For The Analysis of Pollutants" unless other test procedures have been specified in this permit. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and instrumentation at intervals to insure accuracy of measurements.

6. RECORDING OF RESULTS

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

A. The exact place and date of sampling; (time of sampling not required on EPA 4500)

B. The person(s) who performed the sampling or measurements;

C. The date the analyses were performed on those samples;

D. The person(s) who performed the analyses;

E. The analytical techniques or methods used; and

F. The results of all analyses and measurements.

7. RECORDS RETENTION

The permittee shall retain all of the following records for the wastewater treatment works for a minimum of three years, including:

A. All sampling and analytical records (including internal sampling data not reported);

B. All original recordings for any continuous monitoring instrumentation;

C. All instrumentation, calibration and maintenance records;

D. All plant operation and maintenance records;

E. All reports required by this permit; and

F. Records of all data used to complete the application for this permit for a period of at least three years from the date of the sample, measurement, report, or application.

These periods will be extended during the course of any unresolved litigation, or when requested by the Regional Administrator or the Ohio EPA. The three year period for retention of records shall start from the date of sample, measurement, report, or application.

8. AVAILABILITY OF REPORTS

Except for data determined by the Ohio EPA to be entitled to confidential status, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the appropriate district offices of the Ohio EPA. Both the Clean Water Act and Section 6111.05 Ohio Revised Code state that effluent data and receiving water quality data shall not be considered confidential.

9. DUTY TO PROVIDE INFORMATION

The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking, and reissuing, or terminating the permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

10. RIGHT OF ENTRY

The permittee shall allow the Director or an authorized representative upon presentation of credentials and other documents as may be required by law to:

A. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit.

B. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit.

C. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit.

D. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

11. UNAUTHORIZED DISCHARGES

A. Bypassing or diverting of wastewater from the treatment works is prohibited unless:

1. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

2. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of downtime. This condition is not satisfied if adequate back up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

3. The permittee submitted notices as required under paragraph D. of this section,

B. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.

C. The Director may approve an unanticipated bypass after considering its adverse effects, if the Director determines that it has met the three conditions listed in paragraph 11.A. of this section.

D. The permittee shall submit notice of an unanticipated bypass as required in section 12. A.

E. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded if that bypass is for essential maintenance to assure efficient operation.

12. NONCOMPLIANCE NOTIFICATION

A. The permittee shall by telephone report any of the following within twenty-four (24) hours of discovery at (toll free) 1-800-282-9378:

1. Any noncompliance which may endanger health or the environment;

2 Any unanticipated bypass which exceeds any effluent limitation in the permit; or

3. Any upset which exceeds any effluent limitation in the permit.

4. Any violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in the permit.

B. For the telephone reports required by Part 12.A., the following information must be included:

1. The times at which the discharge occurred, and was discovered;

2. The approximate amount and the characteristics of the discharge;

3. The stream(s) affected by the discharge;

4. The circumstances which created the discharge;

5. The names and telephone numbers of the persons who have knowledge of these circumstances;

6. What remedial steps are being taken; and

7. The names and telephone numbers of the persons responsible for such remedial steps.

C. These telephone reports shall be confirmed in writing within five days of the discovery of the discharge and/or noncompliance and submitted to the appropriate Ohio EPA district office. The report shall include the following:

1. The limitation(s) which has been exceeded;

2. The extent of the exceedance(s);

3. The cause of the exceedance(s);

4. The period of the exceedance(s) including exact dates and times;

5. If uncorrected, the anticipated time the exceedance(s) is expected to continue, and

6. Steps being taken to reduce, eliminate, and/or prevent occurrence of the exceedance(s).

D. Compliance Schedule Events:

If the permittee is unable to meet any date for achieving an event, as specified in the schedule of compliance, the permittee shall submit a written report to the appropriate district office of the Ohio EPA within 14 days of becoming aware of such situation. The report shall include the following:

1. The compliance event which has been or will be violated;

2. The cause of the violation;

3. The remedial action being taken;

4. The probable date by which compliance will occur; and

5. The probability of complying with subsequent and final events as scheduled.

E. The permittee shall report all instances of noncompliance not reported under paragraphs A, B, or C of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraphs B and C of this section.

F. Where the permittee becomes aware that it failed to submit any relevant application or submitted incorrect information in a permit application or in any report to the director, it shall promptly submit such facts or information.

13. RESERVED

14. DUTY TO MITIGATE

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

15. AUTHORIZED DISCHARGES

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant identified in this permit more frequently than, or at a level in excess of, that authorized by this permit shall constitute a violation of the terms and conditions of this permit. Such violations may result in the imposition of civil and/or criminal penalties as provided for in Section 309 of the Act and Ohio Revised Code Sections 6111.09 and 6111.99.

16. DISCHARGE CHANGES

The following changes must be reported to the appropriate Ohio EPA district office as soon as practicable:

A. For all treatment works, any significant change in character of the discharge which the permittee knows or has reason to believe has occurred or will occur which would constitute cause for modification or revocation and reissuance. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. Notification of permit changes or anticipated noncompliance does not stay any permit condition.

B. For publicly owned treatment works:

1. Any proposed plant modification, addition, and/or expansion that will change the capacity or efficiency of the plant;

2. The addition of any new significant industrial discharge; and

3. Changes in the quantity or quality of the wastes from existing tributary industrial discharges which will result in significant new or increased discharges of pollutants.

C. For non-publicly owned treatment works any proposed facility expansions, production increases, or process modifications, which will result in new, different, or increased discharges of pollutants.

Following this notice, modifications to the permit may be made to reflect any necessary changes in permit conditions, including any necessary effluent limitations for any pollutants not identified and limited herein. A determination will also be made as to whether a National Environmental Policy Act (NEPA) review will be required. Sections 6111.44 and 6111.45, Ohio Revised Code, require that plans for treatment works or improvements to such works be approved by the Director of the Ohio EPA prior to initiation of construction.

D. In addition to the reporting requirements under 40 CFR 122.41(l) and per 40 CFR 122.42(a), all existing manufacturing, commercial mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe:

1. That any activity has occurred or will occur which would result in the discharge on a routine or frequent basis of any toxic pollutant which is not limited in the permit. If that discharge will exceed the highest of the "notification levels" specified in 40 CFR Sections 122.42(a)(1)(i) through 122.42(a)(1)(iv).

2. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the "notification levels" specified in 122.42(a)(2)(i) through 122.42(a)(2)(iv).

17. TOXIC POLLUTANTS

The permittee shall comply with effluent standards or prohibitions established under Section 307 (a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement. Following establishment of such standards or prohibitions, the Director shall modify this permit and so notify the permittee.

18. PERMIT MODIFICATION OR REVOCATION

A. After notice and opportunity for a hearing, this permit may be modified or revoked, by the Ohio EPA, in whole or in part during its term for cause including, but not limited to, the following:

1. Violation of any terms or conditions of this permit;

2. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or

3. Change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.

B. Pursuant to rule 3745-33-04, Ohio Administrative Code, the permittee may at any time apply to the Ohio EPA for modification of any part of this permit. The filing of a request by the permittee for a permit modification or revocation does not stay any permit condition. The application for modification should be received by the appropriate Ohio EPA district office at least ninety days before the date on which it is desired that the modification become effective. The application shall be made only on forms approved by the Ohio EPA.

19. TRANSFER OF OWNERSHIP OR CONTROL

This permit may be transferred or assigned and a new owner or successor can be authorized to discharge from this facility, provided the following requirements are met:

A. The permittee shall notify the succeeding owner or successor of the existence of this permit by a letter, a copy of which shall be forwarded to the appropriate Ohio EPA district office. The copy of that letter will serve as the permittee's notice to the Director of the proposed transfer. The copy of that letter shall be received by the appropriate Ohio EPA district office sixty (60) days prior to the proposed date of transfer;

B. A written agreement containing a specific date for transfer of permit responsibility and coverage between the current and new permittee (including acknowledgement that the existing permittee is liable for violations up to that date, and that the new permittee is liable for violations from that date on) shall be submitted to the appropriate Ohio EPA district office within sixty days after receipt by the district office of the copy of the letter from the permittee to the succeeding owner;

At anytime during the sixty (60) day period between notification of the proposed transfer and the effective date of the transfer, the Director may prevent the transfer if he concludes that such transfer will jeopardize compliance with the terms and conditions of the permit. If the Director does not prevent transfer, he will modify the permit to reflect the new owner.

20. OIL AND HAZARDOUS SUBSTANCE LIABILITY

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Clean Water Act.

21. SOLIDS DISPOSAL

Collected screenings, slurries, sludges, and other solids shall be disposed of in such a manner as to prevent entry of those wastes into waters of the state. For publicly owned treatment works, these shall be disposed of in accordance with the approved Ohio EPA Sludge Management Plan.

22. CONSTRUCTION AFFECTING NAVIGABLE WATERS

This permit does not authorize or approve the construction of any onshore or offshore physical structures or facilities or the undertaking of any work in any navigable waters.

23. CIVIL AND CRIMINAL LIABILITY

Except as exempted in the permit conditions on UNAUTHORIZED DISCHARGES or UPSETS, nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

24. STATE LAWS AND REGULATIONS

Nothing in this permit shall be construed to preclude the institution of any legal action nor relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the Clean Water Act.

25. PROPERTY RIGHTS

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

26. UPSET

The provisions of 40 CFR Section 122.41(n), relating to "Upset," are specifically incorporated herein by reference in their entirety. For definition of "upset," see Part III, Paragraph 1, DEFINITIONS.

27. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

28. SIGNATORY REQUIREMENTS

All applications submitted to the Director shall be signed and certified in accordance with the requirements of 40 CFR 122.22.

All reports submitted to the Director shall be signed and certified in accordance with the requirements of 40 CFR Section 122.22.

29. OTHER INFORMATION

A. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.

B. ORC 6111.99 provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $25,000 per violation.

C. ORC 6111.99 states that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than $25,000 per violation.

D. ORC 6111.99 provides that any person who violates Sections 6111.04, 6111.042, 6111.05, or division (A) of Section 6111.07 of the Revised Code shall be fined not more than $25,000 or imprisoned not more than one year, or both.

30. NEED TO HALT OR REDUCE ACTIVITY

40 CFR 122.41(c) states that it shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with conditions of this permit.

31. APPLICABLE FEDERAL RULES

All references to 40 CFR in this permit mean the version of 40 CFR which is effective as of the effective date of this permit.

32. AVAILABILITY OF PUBLIC SEWERS

Not withstanding the issuance or non-issuance of an NPDES permit to a semi-public disposal system, whenever the sewage system of a publicly owned treatment works becomes available and accessible, the permittee operating any semi-public disposal system shall abandon the semi-public disposal system and connect it into the publicly owned treatment works.

Part IV. STORM WATER POLLUTION PREVENTION PLANS

A storm water pollution prevention plan (plan) shall be developed to address each outfall that discharges to waters of the state that contains storm water associated with industrial activity. Storm water pollution prevention plans shall be prepared in accordance with good engineering practices. The plan shall identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges associated with industrial activity from the facility. In addition, the plan shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in storm water discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit. Facilities must implement the provisions of the storm water pollution prevention plan required under this part as a condition of this permit.

A. Deadlines for Plan Preparation and Compliance.

1. The plan for a storm water discharge associated with industrial activity:

   a. shall be prepared within six months of the effective date of this permit (and updated as appropriate);
   b. shall provide for implementation and compliance with the terms of the plan within twelve months of the effective date of this permit.

2. Upon a showing of good cause, the Director may establish a later date for preparing and compliance with a plan for a storm water discharge associated with industrial activity.

B. Signature and Plan Review.

1. The plan shall be signed in accordance with Part VI, and be retained on-site at the facility which generates the storm water discharge.

2. The permittee shall make plans available upon request to the Ohio EPA Director, or authorized representative, or Regional Administrator of U.S. EPA, or in the case of a storm water discharge associated with industrial activity which discharges through a municipal separate storm sewer system, to the operator of the municipal system.

3. The Director may notify the permittee at any time that the plan does not meet one or more of the minimum requirements of this Part. Within 30 days of such notification from the Director, the permittee shall make the required changes to the plan and shall submit to the Director a written certification that the requested changes have been made.

4. All storm water pollution prevention plans required under this permit are considered reports that shall be available to the public under Section 308(b) of the Act. The permittee may claim any portion of a storm water pollution plan as confidential in accordance with 40 CFR Part 2 and does not have to release any portion of the plan describing facility security measures (such as provided for in Part IV.D.7.b.(8) of this permit). An interested party wishing a copy of a discharger's SWP3 will have to contact the Ohio EPA to obtain a copy.

C. Keeping Plans Current.

The permittee shall amend the plan whenever there is a change in design, construction, operation, or maintenance, that has a significant effect on the potential for the discharge of pollutants to the waters of the State or if the storm water pollution prevention plan proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified under Part IV.D.2 of this permit, or otherwise achieving the general objectives of controlling pollutants in storm water discharges associated with industrial activity. Amendments to the plan may be reviewed by Ohio EPA in the same manner as Part IV.B above.

D. Contents of Plan.

The plan shall include, at a minimum, the following items:

1. Pollution Prevention Team - Each plan shall identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team that are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.

2. Description of Potential Pollutant Sources. Each plan shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutants to storm water discharges or which may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. Each plan shall identify all activities and significant materials which may potentially be significant pollutant sources. Each plan shall include, at a minimum:

Part IV. STORM WATER POLLUTION PREVENTION PLANS (continued)

D. (continued)

a. Drainage.

(1) A site map indicating an outline of the drainage area of each storm water outfall, each existing structural control measure to reduce pollutants in storm water runoff, surface water bodies, locations where significant materials are exposed to precipitation, locations where major spills or leaks identified under Part IV.D.2.c of this permit have occurred, and the locations of the following activities where such activities are exposed to precipitation: fueling stations, vehicle

and equipment maintenance and/or cleaning areas, loading/unloading areas, locations used for the treatment, storage or disposal of wastes, liquid storage tanks, processing areas and storage areas.

(2) For each area of the facility that generates storm water discharges associated with industrial activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow, and an estimate of the types of pollutants which are likely to be present in storm water discharges associated with industrial activity. Flows with a significant potential for causing erosion shall be identified.

b. Inventory of Exposed Materials. An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of three years prior to the date of the issuance of this permit and the present; method and location of on-site storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of three years prior to the date of the issuance of this permit and the present; the location and a description of existing structural and non-structural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives.

c. Spills and Leaks. A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at the facility after the date of three years prior to the effective date of this permit.

d. Sampling Data. A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility.

e. Risk Identification and Summary of Potential Pollutant Sources. A narrative description of the potential pollutant sources at the following areas: loading and unloading operations; outdoor storage activities; outdoor manufacturing or processing activities; significant dust or particulate generating processes; and on-site waste disposal practices. The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g. biochemical oxygen demand, etc.) of concerns shall be identified.

3. Measures and Controls. Each facility covered by this permit shall develop a description of storm water management controls appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls:

a. Good Housekeeping - Good housekeeping requires the maintenance of a clean, orderly facility.

b. Preventive Maintenance - A preventive maintenance program shall involve inspection and maintenance of storm water management devices (e.g. cleaning oil/water separators, catch basins) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems.

c. Spill Prevention and Response Procedures - Areas where potential spills can occur, and their accompanying drainage points shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a clean up should be available to personnel.

Part IV. STORM WATER POLLUTION PREVENTION PLANS (continued)

D. (continued)

d. Inspections - In addition to or as part of the comprehensive site evaluation required under Part IV.4. of this permit, qualified facility personnel shall be identified to inspect designated equipment and areas of the facility at appropriate intervals specified in the plan. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained.

e. Employee Training - Employee training programs shall inform personnel at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping and material management practices. The plan shall identify periodic dates for such training.

f. Recordkeeping and Internal Reporting Procedures - A description of incidents such as spills, or other discharges, along with other information describing the quality and quantity of storm water discharges shall be included in the plan required under this part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan.

g. Non-Storm Water Discharges

(1) The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of any test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the on-site drainage points that were directly observed during the test. Such certification may not be feasible if the facility operating the storm water discharge associated with industrial activity does not have access to an outfall, manhole, or other point of access to the ultimate conduit which receives the discharge. In such cases, the source identification section of the storm water pollution plan shall indicate why the certification required by this part was not feasible, along with the identification of potential significant sources of non-storm water at the site. A discharger that is unable to provide the certification required by this paragraph must notify in accordance with Part IV.A of this permit.

(2) Except for flows from fire fighting activities, sources of non-storm water listed in Part VI of this permit that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

h. Sediment and Erosion Control - The plan shall identify areas which, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify measures to limit erosion.

i. Management of Runoff - The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those which control the source of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide that measures determined to be reasonable and appropriate shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity (see Parts IV.D.2.(b), (d) and (e) of this permit) shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: including vegetative swales and practices, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, and wet detention/retention devices.

4. Comprehensive Site Compliance Evaluation. Qualified personnel shall conduct site compliance evaluations at appropriate intervals specified in the plan, but, except as provided in paragraph IV.D.4.d, in no case less than once a year. Such evaluations shall provide:

a. Material handling areas and other potential sources of pollution identified in the plan in accordance with paragraph IV.D.2 of this permit shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Structural storm water management measures, sediment and control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.

D. (continued)

b. Based on the results of the inspection, the description of potential pollutant sources identified in the plan in accordance with paragraph IV.D.2 of this permit and pollution prevention measures and controls identified in the plan in accordance with paragraph IV.D.3 of this permit shall be revised as appropriate within two weeks of such inspection and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than twelve weeks after the inspection.

c. A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph IV.D.4.b of the permit shall be made and retained as part of the storm water pollution prevention plan for at least three years. The report shall be signed in accordance with Part VI.B of this permit.

5. Additional requirements for storm water discharges associated with industrial activity through municipal separate storm sewer systems serving a population of 100,000 or more.

In addition to the applicable requirements of this permit, facilities covered by this permit must comply with applicable requirements in municipal storm water management programs developed under NPDES permits issued for the discharge of the municipal separate storm sewer system that receives the facility's discharge, provided the discharger has been notified of such conditions.

6. Consistency with other plans. Storm water pollution prevention plans may reflect requirements for Spill Prevention Control and Countermeasure (SPCC) plans developed for the facility under section 311 of the Act or Best Management Practices (BMP) Programs otherwise required by a NPDES permit for the facility as long as such requirement is incorporated into the storm water pollution prevention plan.

7. Additional requirements for storm water discharges associated with industrial activity from facilities subject to SARA Title III, Section 313 requirements are not applicable to Section 313 water priority chemicals in gaseous or non-soluble liquid or solid [at atmospheric pressure and temperature] forms. In addition to the requirements of Parts IV.D.1 through 4 of this permit and other applicable conditions of this permit, storm water pollution prevention plans for facilities subject to reporting requirements under SARA Title III, Section 313 for chemicals which are classified as "Section 313 water priority chemicals" in accordance with the definition in Part VI of this permit, shall describe and ensure the implementation of practices which are necessary to provide for conformance with the following guidelines:

a. In areas where Section 313 water priority chemicals are stored, processed or otherwise handled, appropriate containment, drainage control and/or diversionary structures shall be provided. At a minimum, one of the following preventive systems or its equivalent shall be used:

(1) Curbing, culverting, gutters, sewers or other forms of drainage control to prevent or minimize the potential for storm water run-on to come into contact with significant sources of pollutants; or
(2) Roofs, covers or other forms of appropriate protection to prevent storage piles from exposure to storm water, and wind blowing.

b. In addition to the minimum standards listed under Part IV.D.7.a of this permit, the storm water pollution prevention plan shall include a complete discussion of measures taken to conform with the following applicable guidelines, other effective storm water pollution prevention procedures, and applicable State rules, regulations and guidelines:

(1) Liquid storage areas where storm water comes into contact with any equipment, tank, container, or other vessel used for Section 313 water priority chemicals.

(a) No tank or container shall be used for the storage of a Section 313 water priority chemical unless its material and construction are compatible with the material stored and conditions of storage such as pressure and temperature, etc.

(b) Liquid storage areas for Section 313 water priority chemicals shall be operated to minimize discharges of Section 313 chemicals. Appropriate measures to minimize discharges of Section 313 chemicals may include secondary containment provided for at least the entire contents of the largest single tank plus sufficient freeboard to allow for precipitation, a strong spill contingency and integrity testing plan, and/or other equivalent measures.

Part IV. STORM WATER POLLUTION PREVENTION PLANS (continued)

D. (continued)

(2) Material storage areas for Section 313 water priority chemicals other than liquids. Material storage areas for Section 313 water priority chemicals other than liquids which are subject to runoff, leaching, or wind blowing shall incorporate drainage or other control features which will minimize the discharge of Section 313 water priority chemicals by reducing storm water contact with Section 313 water priority chemicals.

(3) Truck and rail car loading and unloading areas for liquid Section 313 water priority chemicals. Truck and rail car loading and unloading areas for liquid Section 313 water priority chemicals shall be operated to minimize discharges of Section 313 water priority chemicals. Appropriate measures to minimize discharges of Section 313 chemicals may include: the placement and maintenance of drip pans where spillage may occur (such as hose connections, hose reels and filler nozzles) for use when making and breaking hose connections; a strong spill contingency and integrity testing plan; and/or other equivalent measures.

(4) In facility areas where Section 313 water priority chemicals are transferred, processed or otherwise handled. Processing equipment and materials handling equipment shall be operated so as to minimize discharges of Section 313 water priority chemicals. Materials used in piping and equipment shall be compatible with the substances handled. Drainage from process and materials handling areas shall be designed as described in paragraphs (a), (b) and (c) of this section. Additional protection such as covers or guards to prevent wind blowing, spraying or releases from pressure relief vents from causing a discharge of Section 313 water priority chemicals to the drainage system, and overhangs or door skirts to enclose trailer ends at truck loading/unloading docks shall be provided as appropriate. Visual inspections or leak tests shall be provided for overhead piping conveying Section 313 water priority chemicals without secondary containment.

(5) Discharges from areas covered by paragraphs (1), (2), (3) or (4).

(a) Drainage from areas covered by paragraphs (1), (2), (3) or (4) of this part should be restrained by valves or other positive means to prevent the discharge of a spill or other excessive leakage of Section 313 water priority chemicals. Where containment units are employed, such units may be emptied by pumps or ejectors; however, these shall be manually activated.

(b) Flapper-type drain valves shall not be used to drain containment areas. Valves used for the drainage of containment areas should, as far as is practical, be of manual, open-and-closed design.

(c) If facility drainage is not engineered as above, the final discharge of all in-facility storm sewers shall be equipped to be equivalent with a diversion system that could, in the event of an uncontrolled spill of Section 313 water priority chemicals, return the spilled material to the facility.

(d) Records shall be kept of the frequency and estimated volume (in gallons) of discharges from containment areas.

(6) Facility site runoff other than from areas covered by (1), (2), (3) or (4). Other areas of the facility (those not addressed in paragraphs (1), (2), (3) or (4)), from which runoff which may contain Section 313 water priority chemicals or spills of Section 313 water priority chemicals could cause a discharge shall incorporate the necessary drainage or other control features to prevent discharge of spilled or improperly disposed material and ensure the mitigation of pollutants in runoff or leachate.

Part IV. STORM WATER POLLUTION PREVENTION PLANS (continued)

D. (continued)

(7) Preventive maintenance and housekeeping. All areas of the facility shall be inspected at specific intervals for leaks or conditions that could lead to discharges of Section 313 water priority chemicals or direct contact of storm water with raw materials, intermediate materials, waste materials or products. In particular, facility piping, pumps, storage tanks and bins, pressure vessels, process and material handling equipment, and material bulk storage area shall be examined for any conditions or failures which could cause a discharge. Inspection shall include examination for leaks, wind blowing, corrosion, support or foundation failure, or other forms of deterioration or non-containment. Inspection intervals shall be specified in the plan and shall be based on design and operational experience. Different areas may require different inspection intervals. Where a leak or other condition is discovered which may result in significant releases of Section 313 water priority chemicals to the drainage system, corrective action shall be immediately taken or the unit or process shut down until corrective action can be taken. When a leak or non-containment of a Section 313 water priority chemical has occurred, contaminated soil, debris, or other material must be promptly removed and disposed in accordance with Federal, State, and local requirements and as described in the plan.

(8) Facility security. Facilities shall have the necessary security systems to prevent accidental or intentional entry which could cause a discharge. Security systems described in the plan shall address fencing, lighting, vehicular traffic control, and securing of equipment and buildings.

(9) Training. Facility employees and contractor personnel using the facility shall be trained in and informed of preventive measures at the facility. Employee training shall be conducted at intervals specified in the plan, but not less than once per year, in matters of pollution control laws and regulations, and in the storm water pollution prevention plan and the particular features of the facility and its operation which are designed to minimize discharges of Section 313 water priority chemicals. The plan shall designate a person who is accountable for spill prevention at the facility and who will set up the necessary spill emergency procedures and reporting requirements so that spills and emergency releases of Section 313 water priority chemicals can be isolated and contained before a discharge of a Section 313 water priority chemical can occur. Contractor or temporary personnel shall be informed of facility operation and design features in order to prevent discharges or spills from occurring.

8. Additional Requirements for Salt Storage. Storage piles of salt used for deicing or other commercial or industrial purposes and which generate a storm water discharge associated with industrial activity which is discharged to surface waters of the State shall be enclosed or covered to prevent exposure to precipitation, except for exposure resulting from adding or removing materials from the pile within two years of the effective date of this permit. Piles do not need to be enclosed or covered where storm water from the pile is not discharged to surface waters of the State.

Part V. NUMERIC EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

A. Coal Pile Runoff Effluent Limitations. Any discharge of coal pile runoff is authorized to discharge as of the effective date of this permit and shall comply with the following effluent limitations as expeditiously as practicable, but no later than three years after the effective date of this permit. Coal pile runoff shall not be diluted with storm water or other flow in order to meet these limitations.

Units	Parameter	Daily Minimum	Daily Maximum
mg/l	Total Suspended Solids	-	50
S.U.	pH	6.0	9.0

Any untreated overflow from facilities designed, constructed and operated to treat the volume of coal pile runoff which is associated with 10 year, 24-hour rainfall event shall not be subject to the limitation for Total Suspended Solids. It is the permittee's responsibility to demonstrate to the Ohio EPA that a 10-year, 24-hour rainfall event has occurred and the volume of the overflow to which the Total Suspended Solids effluent limitation does not apply.

B. Monitoring Requirements. Only the activities described in the following matrix and associated definitions are required to conduct monitoring. The monitoring required in the following matrix shall be conducted annually. Monitoring shall be initiated within twelve months of the effective date of this permit and henceforth on an annual basis, weather conditions permitting. A permittee may, in lieu of annual monitoring, certify that industrial materials are not exposed to storm water; such certification shall be submitted to the Ohio EPA upon request of the Director.

1. MONITORING REQUIREMENTS MATRIX

Reporting Units	Parameter	INDUSTRIAL ACTIVITY CATEGORIES											
		a	b[1,2]	c	d	e	f	g	h	i[2]	j	k	l[1]
mg/l	Oil and Grease		X	X	X	X	X	X	X	X	X	X	X
mg/l	5-day Biochemical Oxygen Demand		X							X		X	
mg/l	Chemical Oxygen Demand		X	X	X	X	X		X	X			X
mg/l	Total Suspended Solids		X		X	X	X	X	X	X	X	X	X
mg/l	Total Kjeldahl Nitrogen			X								X	
mg/l	Phosphorus											X	
S.U.	pH		X	X	X	X	X	X	X	X	X	X	X
TU.	Acute Toxicity												
Hours	Duration of Storm Event		X	X	X	X	X	X	X	X	X	X	X
Inches	Precipitation		X	X	X	X	X	X	X	X	X	X	X
Hours	Duration Between Storm Events*		X	X	X	X	X	X	X	X	X	X	X
Gallons	Volume (est)		X	X	X	X	X	X	X	X	X	X	X
mg/l	Nitrate-Nitrogen												
mg/l	Nitrite-Nitrogen												
ug/l	Lead, Total		X	X					X				
ug/l	Cadmium, Total		X[3]	X									
ug/l	Copper, Total		X[3]				X	X	X		X		
ug/l	Arsenic, Total		X[3]	X			X						
ug/l	Chromium, Total		X[3]	X			X						
mg/l	Ammonia												
ug/l	Magnesium, Total			X									

Part V. NUMERIC EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

B. (continued)

Reporting Units	Parameter	INDUSTRIAL ACTIVITY CATEGORIES											
		a	b[1]	c	d	e	f	g	h	i[2]	j	k	l[3]
ug/l	Magnesium, Dissolved			X									
mg/l	Total Dissolved Solids			X									
mg/l	Total Organic Carbon			X									
ug/l	Barium, Total			X									
mg/l	Cyanide, Total			X									
ug/l	Mercury, Total			X									
ug/l	Selenium, Total			X									
ug/l	Silver, Total			X									
ug/l	Pentachlorophenol				X								
ug/l	Nickel, Total							X			X		
ug/l	Zinc, Total							X			X		
#/100ml	Fecal Coliform											X	

* Time between the storm event when sampling is being conducted and the last storm event producing rainfall greater than 0.1 inches.

(1) and any pollutant limited in an effluent guideline or categorical pretreatment standard which the facility is subject.

(2) and the primary ingredient used in the deicing materials used at the site (e.g., ethylene glycol, urea, etc.).

(3) Facilities that are classified as SIC 33 only because they manufacture pure silicon and/or semiconductor grade silicon are not required to monitor for this parameter.

2. Incustrial Activity Categories Definitions

a. Section 313 of SARA Title III Facilities. As of the effective date of this permit, facilities with storm water discharges associated with industrial activity that are subject to requirements to report releases into the environment under Section 313 of SARA Title III for chemicals which are classified as 'Section 313 water priority chemicals' are not (as they may have been in a previous permit) required to monitor storm water that is discharged from the facility unless required by paragraphs V.B.2.b through B.2.l.

b. Primary Metal Industries. Facilities with storm water discharges associated with industrial activity classified as Standard Industrial Classification (SIC) 33 (Primary Metal Industry) are required to monitor such storm water that is discharged from the facility.

c. Land Disposal Units/Incinerators/BIFs. Facilities with storm water discharges associated with industrial activity from any active or inactive landfill, land application sites or open dump without a stabilized final cover that has received any industrial wastes from a facility with a Standard Industrial Classification (SIC) of between 20-39 (manufacturing); and incinerators (including Boilers and Industrial Furnaces (BIFs)) that burn hazardous waste and operate under interim status or a permit under Subtitle C of RCRA, are required to monitor such storm water that is discharged from the facility.

d. Wood Treatment Using Chlorophenolic Formulations. Facilities with storm water discharges associated with industrial activity from areas that are used for wood treatment, wood surface application or storage of treated or surface protected wood at any wood preserving or wood surface facilities are required to monitor such storm water that is discharged from the facility.

e. Wood Treatment Using Creosote Formulations. Facilities with storm water discharges associated with industrial activity from areas that are used for wood treatment, wood surface application or storage of treated or surface protected wood at any wood preserving or wood surface facilities are required to monitor such storm water that is discharged from the facility.

Part V. NUMERIC EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

B. (continued)

f. Wood Treatment Using Chromium-Arsenic Formulations. Facilities with storm water discharges associated with industrial activity from areas that are used for wood treatment, wood surface application or storage of treated or surface protected wood at any wood preserving or wood surface facilities are required to monitor such storm water that is discharged from the facility.

g. Coal Pile Runoff. Facilities with storm water discharges associated with industrial activity from coal pile runoff are required to monitor such storm water that is discharged from the facility.

h. Battery Reclaimers. Facilities with storm water discharges associated with industrial activity from areas used for storage of lead acid batteries, reclamation products, or waste products, and areas used for lead acid battery reclamation (including material handling activities) at facilities that reclaim lead acid batteries are required to monitor such storm water that is discharged from the facility.

i. Airports. At airports with over 50,000 flight operations per year, facilities with storm water discharges associated with industrial activity from areas where aircraft or airport deicing operations occur (including runways, taxiways, ramps, and dedicated aircraft deicing stations) are required to monitor such storm water that is discharged from the facility.

j. Coal-fired Steam Electric Facilities. Facilities with storm water discharges associated with industrial activity from coal handling sites at coal fired steam electric power generating facilities (other than discharges in whole or in part from coal piles subject to storm water effluent guidelines at 40 CFR 423 - which are not eligible for coverage under this permit) are required to monitor such storm water that is discharged from the facility.

k. Animal Handling / Meat Packing. Facilities with storm water discharges associated with industrial activity from animal handling areas, manure management (or storage) areas, and production waste management (or storage) areas that are exposed to precipitation at meat packing plants, poultry packing plants, and facilities that manufacture animal and marine fats and oils, are required to monitor such storm water that is discharged from the facility.

l. Additional Facilities. Facilities with storm water discharges associated with industrial activity that:

(1) come in contact with storage piles for solid chemicals used as raw materials that are exposed to precipitation at facilities classified as SIC 30 (Rubber and Miscellaneous Plastics Products) or SIC 28 (Chemicals and Allied Products);

(2) are from those areas at automobile junkyards with any of the following: (A) over 250 auto/truck bodies with drivelines (engine, transmission, axles, and wheels), 250 drivelines, or any combination thereof (in whole or in parts) are exposed to storm water; (B) over 500 auto/truck units (bodies with or without drivelines in whole or in parts) are stored exposed to storm water; or (C) over 100 units per year are dismantled and drainage or storage of automotive fluids occurs in areas exposed to storm water;

(3) come into contact with lime storage piles that are exposed to storm water at lime manufacturing facilities;

(4) are from oil handling sites at oil fired steam electric power generating facilities;

(5) are from cement manufacturing facilities and cement kilns (other than discharges in whole or in part from material storage piles subject to storm water effluent guidelines at 40 CFR 411 - which are not eligible for coverage under this permit);

(6) are from ready-mixed concrete facilities; or

(7) are from ship building and repairing facilities;

are required to monitor such storm water discharged from the facility.

Part V. NUMERIC EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

E. (continued)

3. Sample Type. Take a minimum of one grab sample from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first thirty minutes of the discharge. If the collection of a grab sample during the first thirty minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first thirty minutes was impracticable.

4. Sampling Waiver. When a discharger is unable to collect samples due to adverse climatic conditions, the discharger must submit in lieu of sampling data a description of why samples could not be collected, including available documentation of the event. Adverse climatic conditions which may prohibit the collection of samples includes weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

5. Representative Discharge. When a facility has two or more outfalls that, based on a consideration of features and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfalls. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area (e.g. low (under 40%), medium (40% to 65%) or high (above 65%)) shall be provided.

C. **Toxicity Testing.** Not Required.

D. **Alternative Certification of "Not Present or No Exposure."** You are not subject to the analytical monitoring requirement of this part provided: you make a certification for a given outfall, or on a pollutant-by-pollutant basis in lieu of monitoring required under this part, that material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, or significant materials from past industrial activity that are located in areas of the facility within the drainage area of the outfall are not presently exposed to storm water and are not expected to be exposed to storm water for the certification period; and your certification is signed in accordance with Attachment VI.G and retained in the SWP3. If you cannot certify for an entire period, you must note the date exposure was eliminated and perform any monitoring required up until that date.

Part VI. OTHER STORM WATER REQUIREMENTS, DEFINITIONS AND AUTHORIZATION

A. **Failure to Certify.** Any facility that is unable to provide the certification required under paragraph IV.D.3.g.(1) (testing for non-storm water discharges), must notify the Director within 180 days of the effective date of this permit. Such notification shall describe: the procedure of any test conducted for the presence of non-storm water discharges; the results of such test or other relevant observations; potential sources of non-storm water discharges to the storm sewer; and why adequate tests for such storm sewers were not feasible.

B. **Signatory Requirements.** See Part III.28.

C. **Definitions.**

"Section 313 water priority chemical" means a chemical or chemical categories which are: 1) are listed at 40 CFR 372.65 pursuant to Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986, also titled the Emergency Planning and Community Right-to-Know Act of 1986; 2) are present at or above threshold levels at a facility subject to SARA Title III, Section 313 reporting requirements; and 3) that meet at least one of the following criteria: (i) are listed in Appendix D of 40 CFR 122 on either Table II (organic priority pollutants), Table III (certain metals, cyanides, and phenols) or Table V (certain toxic pollutants and hazardous substances); (ii) are listed as a hazardous substance pursuant to section 311(b)(2)(A) of the Act at 40 CFR 116.4; or (iii) are pollutants for which EPA has published acute or chronic water quality criteria.

"Significant materials" includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical the facility is required to report pursuant to Section 313 of Title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges.

"Significant spills" includes, but is not limited to: releases of oil or hazardous substances in excess of reportable quantities under section 311 of the Clean Water Act (see 40 CFR 110.10 and CFR 117.21) or section 102 of CERCLA (see 40 CFR 302.4).

"Storm Water" means storm water runoff, snow melt runoff, and surface runoff and drainage.

"Definition of Storm Water Associated with Industrial Activity" means the discharge from any conveyance which is used for collecting and conveying storm water and which is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the NPDES program. For the categories of industries identified in subparagraphs (i) through (x) of this subsection, the term includes, but is not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined at 40 CFR 401); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and finished products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water. For the categories of industries identified in subparagraph (xi), the term includes only storm water discharges from all areas listed in the previous sentence (except access roads) where material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water. For the purposes of this paragraph, material handling activities include the: storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, finished product, by-product or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with storm water drained from the above described areas. Industrial facilities (including industrial facilities that are Federally or municipally owned or operated that meet the description of the facilities listed in this paragraph (i)-(xi)) include those facilities designated under 40 CFR 122.26(a)(1)(v). The following categories of facilities are considered to be engaging in "industrial activity" for purposes of this subsection:

(i) Facilities subject to storm water effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards under 40 CFR Subchapter N (except facilities with toxic pollutant effluent standards which are exempted under category (xi) of this paragraph);

(ii) Facilities classified as Standard Industrial Classifications 24 (except 2434), 26 (except 265 and 267), 28 (except 283 and 285) 29, 311, 32 (except 323), 33, 3441, 373;

C. (continued)

(iii) Facilities classified as Standard Industrial Classifications 10 through 14 (mineral industry) including active or inactive mining operations (except for areas of coal mining operations meeting the definition of a reclamation area under 40 CFR 434.11(l)) and oil and gas exploration, production, processing, or treatment operations, or transmission facilities that discharge storm water contaminated by contact with or that has come into contact with, any overburden, raw material, intermediate products, finished products, byproducts or waste products located on the site of such operations; inactive mining operations are mining sites that are not being actively mined, but which have an identifiable owner/operator;

(iv) Hazardous waste treatment, storage, or disposal facilities, including those that are operating under interim status or a permit under Subtitle C of RCRA;

(v) Landfills, land application sites, and open dumps that have received any industrial wastes (waste that is received from any of the facilities described under this subsection) including those that are subject to regulation under Subtitle D of RCRA;

(vi) Facilities involved in the recycling of materials, including metal scrapyards, battery reclaimers, salvage yards, and automobile junkyards, including but not limited to those classified as Standard Industrial Classification 5015 and 5093;

(vii) Steam electric power generating facilities, including coal handling sites;

(viii) Transportation facilities classified as Standard Industrial Classifications 40, 41, 42 (except 4221-25), 43, 44, 45, and 5171 which have vehicle maintenance shops, equipment cleaning operations, or airport deicing operations. Only those portions of the facility that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, airport deicing operations, or which are otherwise identified under paragraphs (i)-(vii) or (ix)-(xi) of this subsection are associated with industrial activity;

(ix) Treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that are located within the confines of the facility, with a design flow of 1.0 mgd or more, or required to have an approved pretreatment program under 40 CFR 403. Not included are farm lands, domestic gardens or lands used for sludge management where sludge is beneficially reused and which are not physically located in the confines of the facility, or areas that are in compliance with 40 CFR 503;

(x) Construction activity - This category of industrial activity is not regulated under this permit.

(xi) Facilities under Standard Industrial Classifications 20, 21, 22, 23, 2434, 25, 265, 267, 27, 283, 285, 30, 31 (except 311), 34 (except 3441), 35, 36, 37 (except 373), 38, 39, 4221-25, (and which are not otherwise included within categories (ii)-(x)).

"SWPPP" means storm water pollution prevention plan to be completed as a condition of this permit (see Part IV of this permit).

"Time-weighted composite" means a composite sample consisting of a mixture of equal volume aliquots collected at a constant time interval.

"Waste pile" means any non-containerized accumulation of solid, non-flowing waste that is used for treatment or storage.

"10-year, 24-hour precipitation event" means the maximum 24-hour precipitation event with a probable reoccurrence interval of once in 10 years. This information is available in "Weather Bureau Technical Paper No. 40,", May 1961 and "NOAA Atlas 2," 1973 for the 11 Western States, and may be obtained from the National Climatic Center of the Environmental Data Service, National Oceanic and Atmospheric Administration, U.S. Department of Commerce.

"Bypass" means the intentional diversion of waste streams from any portion of the treatment facility.

"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

#10

OhioEPA
State of Ohio Environmental Protection Agency

STREET ADDRESS:
Lazarus Government Center
122 S. Front Street
Columbus, Ohio 43215

TELE: (614) 644-3020 FAX: (614) 644-3184

MAILING ADDRESS:
P.O. Box 1049
Columbus, OH 43216-1049

June 2, 2004

Re: Ohio EPA Permit No. 1IN00089*ED
Facility Name: Dayton Thermal Products

Behr
Dayton Thermal Products
1600 Webster Street
Dayton, Ohio 45404

Ladies and Gentlemen:

Transmitted herewith is one copy of final Modification to the above-referenced permit. This modification is effective on June 1, 2004.

If you have any questions, please contact the Ohio EPA Southwest District Office.

Patti L. Smith, Supervisor
Permit Processing Unit
Division of Surface Water

PLS/dks

Enclosure

CERTIFIED MAIL

cc: Southwest District Office
S. Kemper, DSW
Journal Room
File

DAIMLERCHRYSLER DOCUMENT CONTROL NO.
SC001.10272004.008

Ohio Environmental Protection Agency
Modification of National Pollutant Discharge Elimination System (NPDES) Permit

Issue Date: April 8, 2004 Existing Permit No.: 1IN00089*DD

Effective Date: June 1, 2004 Application No.: OH0009199

Entity Name: Behr Dayton Thermal Products

Facility Location: 1600 Webster Street, Dayton, Ohio, Montgomery County

In accordance with Rule 3745-33-04 (D) of the Ohio Administrative Code, the above referenced NPDES permit is hereby modified as follows:

Revision

Add director's decision statment on page 1; add reporting codes 03864 - 1,2-Cis - Dichloroethene, 34506 - 1,1,1-Trichlorethane, 39175 - Vinal Chloride, 39180- Trichlorethylene, 61162 - 1,1,-Dichloroethene and 78389 - Tetrachloroethene with limits and loadings, and add "Loadings calculated based on 0.288 mgd flow" to notes section for outfall 1IN00089002.

Attached is the modified NPDES permit.

All terms and conditions of the existing permit not recommended for modification by this document will remain in effect. Any modified term or condition contained in this modification shall supersede, on the date this modification is effective, the existing respective term or condition of the permit.

When the modification is effective, the Ohio EPA permit number will be changed to 1IN00089*ED. The application number will remain OH0009199.

Christopher Jones
Director

Application No. OH0009199

Modification Issue Date: April 8, 2004

Modification Effective Date: June 1, 2004

Expiration Date: September 30, 2006

Ohio Environmental Protection Agency
Authorization to Discharge Under the
National Pollutant Discharge Elimination System

In compliance with the provisions of the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et. seq., hereinafter referred to as the "Act"), and the Ohio Water Pollution Control Act (Ohio Revised Code Section 6111),

Behr
Dayton Thermal Products

is authorized by the Ohio Environmental Protection Agency, hereinafter referred to as "Ohio EPA," to discharge from the Dayton Thermal Products wastewater treatment works located at 1600 Webster Street, Dayton, Ohio, Montgomery County and discharging to The Great Miami River via storm sewer in accordance with the conditions specified in Parts I, II, III, IV, V, and VI of this permit.

In accordance with the antidegradation rule, OAC 3745-1-05, I have determined that a lowering of water quality in the Great Miami River is necessary. Provision (D)(1)(d) was applied to this application. This provision excludes the need for the submittal and subsequent review of technical alternatives and social and economic issues related to the degradation. Other rule provisions, however, including public participation and appropriate intergovernmental coordination were required and considered prior to reaching this decision.

This permit is conditioned upon payment of applicable fees as required by Section 3745.11 of the Ohio Revised Code.

This permit and the authorization to discharge shall expire at midnight on the expiration date shown above. In order to receive authorization to discharge beyond the above date of expiration, the permittee shall submit such information and forms as are required by the Ohio EPA no later than 180 days prior to the above date of expiration.

Christopher Jones
Director

Total Pages: 28

art I, A. - FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge accordance with the following limitations and monitoring requirements from outfall 1IN00089001. See Part II, OTHER EQUIREMENTS, for locations of effluent sampling.

able - Final Outfall - 001 - Final

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
	Concentration Specified Units				Loading* kg/day					
Parameter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly	Measuring Frequency	Sampling Type	Monitoring Months
0010 - Water Temperature - C	-	-	-	-	-	-	-	1 / 2 Weeks	Continuous	All
0050 - Flow Rate - MGD	-	-	-	-	-	-	-	1/Day	24hr Total	All
1941 - pH, Maximum - S.U.	9.0	-	-	-	-	-	-	1 / 2 Weeks	Grab	All
1942 - pH, Minimum - S.U.	-	6.5	-	-	-	-	-	1 / 2 Weeks	Grab	All

lotes for Station Number 1IN00089001:

'his discharge is limited to non-contact cooling water and storm runoff; it is to be free of process wastes and other contaminants.

ampling shall be performed when discharging. If NO DISCHARGE OCCURS DURING THE ENTIRE MONTH, report "AL" in the first olumn of the first day of the month on the 4500 Form (Monthly Operating Report). A signature is still required.

se of a maximum indicating thermometer for temperature is acceptable.

art I, A. - FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge accordance with the following limitations and monitoring requirements from outfall 1IN00089002. See Part II, OTHER EQUIREMENTS, for locations of effluent sampling.

able - Final Outfall - 002 - Final

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
	Concentration Specified Units				Loading* kg/day					
Parameter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly	Measuring Frequency	Sampling Type	Monitoring Months
0010 - Water Temperature - C	-	-	-	-	-	-	-	1 / 2 Weeks	Continuous	All
0530 - Total Suspended Solids - mg/l	45	-	-	30	-	-	-	1/Month	24hr Composite	All
3864 - 1,2-Cis-Dichloroethene - ug/l	5.0	-	-	-	0.0054	-	-	1/Month	Grab	All
4506 - 1,1,1-Trichloroethane - ug/l	5.0	-	-	-	0.0054	-	-	1/Month	Grab	All
9175 - Vinyl Chloride - ug/l	5.0	-	-	-	0.0054	-	-	1/Month	Grab	All
9180 - Trichloroethylene - ug/l	5.0	-	-	-	0.054	-	-	1/Month	Grab	All
0050 - Flow Rate - MGD	-	-	-	-	-	-	-	1/Day	24hr Total	All
1162 - 1,1-Dichloroethene - ug/l	5.0	-	-	-	0.0054	-	-	1/Month	Grab	All
1941 - pH, Maximum - S.U.	9.0	-	-	-	-	-	-	1/Month	Grab	All
1942 - pH, Minimum - S.U.	-	6.5	-	-	-	-	-	1/Month	Grab	All
8389 - Tetrachloroethene - ug/l	5.0	-	-	-	0.0054	-	-	1/Month	Grab	All

otes for Station Number 1IN00089002:

oadings calculated based on 0.288 mgd flow.
his discharge is limited to non-contact cooling water, cooling tower blowdown, storm water runoff, and treated groundwater remediation ater; it is to be free of other process wastes and other contaminants.
mpling shall be performed when discharging. If NO DISCHARGE OCCURS DURING THE ENTIRE MONTH, report "AL" in the first lumn of the first day of the month on the 4500 Form (Monthly Operating Report). A signature is still required.
se of a maximum indicating thermometer for temperature is acceptable.

art I, A. - FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge n accordance with the following limitations and monitoring requirements from outfall 1IN00089003. See Part II, OTHER EQUIREMENTS, for locations of effluent sampling.

'able - Final Outfall - 003 - Final

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
	Concentration Specified Units				Loading* kg/day					
Parameter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly	Measuring Frequency	Sampling Type	Monitoring Months
00010 - Water Temperature - C	-	-	-	-	-	-	-	1 / 2 Weeks	Continuous	All
50050 - Flow Rate - MGD	-	-	-	-	-	-	-	1/Day	24hr Total	All
61941 - pH, Maximum - S.U.	9.0	-	-	-	-	-	-	1 / 2 Weeks	Grab	All
61942 - pH, Minimum - S.U.	-	6.5	-	-	-	-	-	1 / 2 Weeks	Grab	All

Notes for Station Number 1IN00089003:

This discharge is limited to non-contact cooling water and storm runoff; it is to be free of process wastes and other contaminants.

Sampling shall be performed when discharging. If NO DISCHARGE OCCURS DURING THE ENTIRE MONTH, report "AL" in the first olumn of the first day of the month on the 4500 Form (Monthly Operating Report). A signature is still required.

Use of a maximum indicating thermometer for temperature is acceptable.

Part II, OTHER REQUIREMENTS

A Description of the location of the required sampling stations are as follows:

Sampling Station	Description of Location
1IN00089001	At manhole adjacent to Leo Street prior to discharge to city storm sewer (Lat: 39 47' 12"; Long: 84 10' 50")
1IN00089002	At manhole adjacent to Webster Street prior to discharge to city storm sewer (Lat: 39 47' 05": Long: 84 10' 50")
1IN00089003	At manhole adjacent to Leo Street prior to discharge to city storm sewer (Lat: 39 46' 58:; Long: 84 10' 50")

B. This permit shall be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the Clean Water Act, if the effluent standard or limitation so issued or approved.

1. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
2. Controls any pollutant not limited in the permit.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Act then applicable.

C. All parameters, except flow, need not be monitored on days when the plant is not normally staffed (Saturdays, Sundays, and Holidays). On those days, report "AN" on the monthly report form.

D. In the event that the permittee's operation requires the use of cooling or boiler water treatment additives that are discharged to surface waters of the state, written permission must be obtained from the director of the Ohio EPA prior to use. Reporting and testing requirements to apply for permission to use additives can be obtained from the Ohio EPA, Central Office, Division of Surface Water, Water Resources Management Section. Reported information will be used to evaluate whether the use of the additive(s) at concentrations expected in the final discharge will be harmful or inimical to aquatic life.

PART III - GENERAL CONDITIONS

1 DEFINITIONS

"Daily load" is the total discharge by weight during any calendar day. If only one sample is taken during a day, the weight of pollutant discharge calculated from it is the daily load.

"Daily concentration" means the arithmetic average of all the determinations of concentration made during the day. If only one sample is taken during the day, its concentration is the daily concentration. Coliform bacteria limitations compliance shall be determined using the geometric mean.

"Weekly load" is the total discharge by weight during any 7-day period divided by the number of days in that 7-day period that the facility was in operation. If only one sample is taken in a 7-day period, the weight of pollutant discharge calculated from it is the 7-day load. If more than one sample is taken during the 7-day period, the 7-day load is calculated by determining the daily load for each day sampled, totaling the daily loads for the 7-day period, and dividing by the number of days sampled.

"Weekly concentration" means the arithmetic average of all the determinations of daily concentration limitation made during the 7-day period. If only one sample is taken during the 7-day period, its concentration is the 7-day concentration for that 7-day period. Coliform bacteria limitations compliance shall be determined using the geometric mean.

"Monthly load" is the total discharge by weight during all days in a calander month divided by the number of days that the facility was in operation during that month. If only one sample is taken during the month the weight of pollutant discharge calculated from it is the monthly load. If more than one sample is taken during the month, the monthly load is calculated by determining the daily load for each day sampled, totaling the daily loads for the month and dividing by the number of days sampled.

"Monthly concentration" means the arithmetic average of all the determinations of daily concentration made during any calender month. If only one sample is taken during the month, its concentration is the monthly concentration for that period. Coliform bacteria limitations compliance shall be determined using the geometric mean.

"85 percent removal" means the arithmetic mean of the values for effluent samples collected in a period of 30 consecutive days shall not exceed 15 percent of the arithmetic mean of the values for influent samples collected at approximately the same times during the same period.

"Absolute Limitations" Compliance with limitations having descriptions of "shall not be less than," "nor greater than," "shall not exceed," "minimum," or "maximum" shall be determined from any single value for effluent samples and/or measurements collected.

"Net concentration" shall mean the difference between the concentration of a given substance in a sample taken of the discharge and the concentration of the same substances in a sample taken at the intake which supplies water to the given process. For the purpose of this definition, samples that are taken to determine the net concentration shall always be 24-hour composite samples made up of at least six increments taken at regular intervals throughout the plant day.

'Net load" shall mean the difference between the load of a given substance as calculated from a sample taken of the discharge and the load of the same substance in a sample taken at the intake which supplies water to given process. For purposes of this definition, samples that are taken to determine the net Loading shall always be 24-hour composite samples made up of at least six increments taken at regular intervals throughout the plant day.

"MGD" means million gallons per day.

"mg/l" means milligrams per liter.

"ug/l" means micrograms per liter.

"ng/l" means nanograms per liter.

"S.U." means standard pH unit.

"kg/day" means kilograms per day.

"Reporting Code" is a five digit number used by the Ohio EPA in processing reported data. The reporting code does not imply the type of analysis used nor the sampling techniques employed.

"Quarterly (1/Quarter) sampling frequency" means the sampling shall be done in the months of March, June, August, and December, unless specificially identified otherwise in the Effluent Limitations and Monitoring Requirements table.

"Yearly (1/Year) sampling frequency" means the sampling shall be done in the month of September, unless specificially identified otherwise in the effluent limitations and monitoring requirements table.

"Semi-annual (2/Year) sampling frequency" means the sampling shall be done during the months of June and December, unless specificially identified otherwise.

"Winter" shall be considered to be the period from November 1 through April 30.

"Bypass" means the intentional diversion of waste streams from any portion of the treatment facility.

"Summer" shall be considered to be the period from May 1 through October 31.

"Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

2 GENERAL EFFLUENT LIMITATIONS

The effluent shall, at all times, be free of substances:

A. In amounts that will settle to form putrescent, or otherwise objectionable, sludge deposits; or that will adversely affect aquatic life or water fowl;

B. Of an oily, greasy, or surface-active nature, and of other floating debris, in amounts that will form noticeable accumulations of scum, foam or sheen;

C. In amounts that will alter the natural color or odor of the receiving water to such degree as to create a nuisance;

D. In amounts that either singly or in combination with other substances are toxic to human, animal, or aquatic life;

E. In amounts that are conducive to the growth of aquatic weeds or algae to the extent that such growths become inimical to more desirable forms of aquatic life, or create conditions that are unsightly, or constitute a nuisance in any other fashion;

F. In amounts that will impair designated instream or downstream water uses.

3. FACILITY OPERATION AND QUALITY CONTROL

All wastewater treatment works shall be operated in a manner consistent with the following:

A. At all times, the permittee shall maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee necessary to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with conditions of the permit.

B. The permittee shall effectively monitor the operation and efficiency of treatment and control facilities and the quantity and quality of the treated discharge.

C. Maintenance of wastewater treatment works that results in degradation of effluent quality shall be scheduled during non-critical water quality periods and shall be carried out in a manner approved by Ohio EPA as specified in the Paragraph in the PART III entitled, "UNAUTHORIZED DISCHARGES".

4. REPORTING

A. Monitoring data required by this permit may be submitted in hardcopy format on the Ohio EPA 4500 report form pre-printed by Ohio EPA or an approved facsimile. Ohio EPA 4500 report forms for each individual sampling station are to be received no later than the 15th day of the month following the month-of-interest. The original report form must be signed and mailed to:

Ohio Environmental Protection Agency
Lazarus Government Center
Division of Surface Water
Enforcement Section ES/MOR
P.O. Box 1049
Columbus, Ohio 43216-1049

Monitoring data may also be submitted electronically using Ohio EPA developed SWIMware software. Data must be transmitted to Ohio EPA via electronic mail or the bulletin board system by the 20th day of the month following the month-of-interest. A Surface Water Information Management System (SWIMS) Memorandum of Agreement (MOA) must be signed by the responsible official and submitted to Ohio EPA to receive an authorized Personal Identification Number (PIN) prior to sending data electronically. A hardcopy of the Ohio EPA 4500 form must be generated via SWIMware, signed and maintained onsite for records retention purposes.

B. If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified below, the results of such monitoring shall be included in the calculation and reporting of the values required in the reports specified above.

C Analyses of pollutants not required by this permit, except as noted in the preceding paragraph, shall not be reported on Ohio EPA report form (4500) but records shall be retained as specified in the paragraph entitled "RECORDS RETENTION".

5. SAMPLING AND ANALYTICAL METHOD

Samples and measurements taken as required herein shall be representative of the volume and nature monitored flow. Test procedures for the analysis of pollutants shall conform to regulation 40 CFR 136, "Test Procedures For The Analysis of Pollutants" unless other test procedures have been specified in this permit. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and instrumentation at intervals to insure accuracy of measurements.

6. RECORDING OF RESULTS

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

A. The exact place and date of sampling; (time of sampling not required on EPA 4500)

B. The person(s) who performed the sampling or measurements;

C. The date the analyses were performed on those samples;

D. The person(s) who performed the analyses;

E. The analytical techniques or methods used; and

F. The results of all analyses and measurements.

7. RECORDS RETENTION

The permittee shall retain all of the following records for the wastewater treatment works for a minimum of three years, including:

A. All sampling and analytical records (including internal sampling data not reported);

B. All original recordings for any continuous monitoring instrumentation;

C All instrumentation, calibration and maintenance records;

D All plant operation and maintenance records;

E. All reports required by this permit; and

F. Records of all data used to complete the application for this permit for a period of at least three years from the date of the sample, measurement, report, or application.

These periods will be extended during the course of any unresolved litigation, or when requested by the Regional Administrator or the Ohio EPA. The three year period for retention of records shall start from the date of sample, measurement, report, or application.

8. AVAILABILITY OF REPORTS

Except for data determined by the Ohio EPA to be entitled to confidential status, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the appropriate district offices of the Ohio EPA. Both the Clean Water Act and Section 6111.05 Ohio Revised Code state that effluent data and receiving water quality data shall not be considered confidential.

9. DUTY TO PROVIDE INFORMATION

The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking, and reissuing, or terminating the permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

10. RIGHT OF ENTRY

The permittee shall allow the Director or an authorized representative upon presentation of credentials and other documents as may be required by law to:

A. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit.

B. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit.

C. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit.

D. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

11. UNAUTHORIZED DISCHARGES

A. Bypassing or diverting of wastewater from the treatment works is prohibited unless:

1. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

2. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of downtime. This condition is not satisfied if adequate back up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

3. The permittee submitted notices as required under paragraph D. of this section,

B. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.

C. The Director may approve an unanticipated bypass after considering its adverse effects, if the Director determines that it has met the three conditions listed in paragraph 11.A. of this section.

D. The permittee shall submit notice of an unanticipated bypass as required in section 12. A.

E. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded if that bypass is for essential maintenance to assure efficient operation.

12. NONCOMPLIANCE NOTIFICATION

A. The permittee shall by telephone report any of the following within twenty-four (24) hours of discovery at (toll free) 1-800-282-9378:

1. Any noncompliance which may endanger health or the environment;

2. Any unanticipated bypass which exceeds any effluent limitation in the permit; or

3. Any upset which exceeds any effluent limitation in the permit.

4. Any violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in the permit.

B. For the telephone reports required by Part 12.A., the following information must be included:

1. The times at which the discharge occurred, and was discovered;

2. The approximate amount and the characteristics of the discharge;

3. The stream(s) affected by the discharge;

4. The circumstances which created the discharge;

5. The names and telephone numbers of the persons who have knowledge of these circumstances;

6. What remedial steps are being taken; and

7. The names and telephone numbers of the persons responsible for such remedial steps.

C. These telephone reports shall be confirmed in writing within five days of the discovery of the discharge and/or noncompliance and submitted to the appropriate Ohio EPA district office. The report shall include the following:

1. The limitation(s) which has been exceeded;

2. The extent of the exceedance(s);

3. The cause of the exceedance(s);

4. The period of the exceedance(s) including exact dates and times;

5. If uncorrected, the anticipated time the exceedance(s) is expected to continue, and

6. Steps being taken to reduce, eliminate, and/or prevent occurrence of the exceedance(s).

D. Compliance Schedule Events:

If the permittee is unable to meet any date for achieving an event, as specified in the schedule of compliance, the permittee shall submit a written report to the appropriate district office of the Ohio EPA within 14 days of becoming aware of such situation. The report shall include the following:

1 The compliance event which has been or will be violated;

2. The cause of the violation;

3. The remedial action being taken;

4. The probable date by which compliance will occur; and

5. The probability of complying with subsequent and final events as scheduled.

E. The permittee shall report all instances of noncompliance not reported under paragraphs A, B, or C of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraphs B and C of this section.

F. Where the permittee becomes aware that it failed to submit any relevant application or submitted incorrect information in a permit application or in any report to the director, it shall promptly submit such facts or information.

13. RESERVED

14. DUTY TO MITIGATE

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

15 AUTHORIZED DISCHARGES

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant identified in this permit more frequently than, or at a level in excess of, that authorized by this permit shall constitute a violation of the terms and conditions of this permit. Such violations may result in the imposition of civil and/or criminal penalties as provided for in Section 309 of the Act and Ohio Revised Code Sections 6111.09 and 6111.99.

16. DISCHARGE CHANGES

The following changes must be reported to the appropriate Ohio EPA district office as soon as practicable:

A. For all treatment works, any significant change in character of the discharge which the permittee knows or has reason to believe has occurred or will occur which would constitute cause for modification or revocation and reissuance. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. Notification of permit changes or anticipated noncompliance does not stay any permit condition.

B. For publicly owned treatment works:

1. Any proposed plant modification, addition, and/or expansion that will change the capacity or efficiency of the plant;

2. The addition of any new significant industrial discharge; and

3. Changes in the quantity or quality of the wastes from existing tributary industrial discharges which will result in significant new or increased discharges of pollutants.

C. For non-publicly owned treatment works any proposed facility expansions, production increases, or process modifications, which will result in new, different, or increased discharges of pollutants.

Following this notice, modifications to the permit may be made to reflect any necessary changes in permit conditions, including any necessary effluent limitations for any pollutants not identified and limited herein. A determination will also be made as to whether a National Environmental Policy Act (NEPA) review will be required. Sections 6111.44 and 6111.45, Ohio Revised Code, require that plans for treatment works or improvements to such works be approved by the Director of the Ohio EPA prior to initiation of construction.

D. In addition to the reporting requirements under 40 CFR 122.41(l) and per 40 CFR 122.42(a), all existing manufacturing, commercial mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe:

1. That any activity has occurred or will occur which would result in the discharge on a routine or frequent basis of any toxic pollutant which is not limited in the permit. If that discharge will exceed the highest of the "notification levels" specified in 40 CFR Sections 122.42(a)(1)(i) through 122.42(a)(1)(iv).

2. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the "notification levels" specified in 122.42(a)(2)(i) through 122.42(a)(2)(iv).

17. TOXIC POLLUTANTS

The permittee shall comply with effluent standards or prohibitions established under Section 307 (a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement. Following establishment of such standards or prohibitions, the Director shall modify this permit and so notify the permittee.

18. PERMIT MODIFICATION OR REVOCATION

A. After notice and opportunity for a hearing, this permit may be modified or revoked, by the Ohio EPA, in whole or in part during its term for cause including, but not limited to, the following:

1. Violation of any terms or conditions of this permit;

2. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or

3. Change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.

B. Pursuant to rule 3745-33-04, Ohio Administrative Code, the permittee may at any time apply to the Ohio EPA for modification of any part of this permit. The filing of a request by the permittee for a permit modification or revocation does not stay any permit condition. The application for modification should be received by the appropriate Ohio EPA district office at least ninety days before the date on which it is desired that the modification become effective. The application shall be made only on forms approved by the Ohio EPA.

19. TRANSFER OF OWNERSHIP OR CONTROL

This permit may be transferred or assigned and a new owner or successor can be authorized to discharge from this facility, provided the following requirements are met:

A. The permittee shall notify the succeeding owner or successor of the existence of this permit by a letter, a copy of which shall be forwarded to the appropriate Ohio EPA district office. The copy of that letter will serve as the permittee's notice to the Director of the proposed transfer. The copy of that letter shall be received by the appropriate Ohio EPA district office sixty (60) days prior to the proposed date of transfer;

B. A written agreement containing a specific date for transfer of permit responsibility and coverage between the current and new permittee (including acknowledgement that the existing permittee is liable for violations up to that date, and that the new permittee is liable for violations from that date on) shall be submitted to the appropriate Ohio EPA district office within sixty days after receipt by the district office of the copy of the letter from the permittee to the succeeding owner;

At anytime during the sixty (60) day period between notification of the proposed transfer and the effective date of the transfer, the Director may prevent the transfer if he concludes that such transfer will jeopardize compliance with the terms and conditions of the permit. If the Director does not prevent transfer, he will modify the permit to reflect the new owner.

20. OIL AND HAZARDOUS SUBSTANCE LIABILITY

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Clean Water Act.

21. SOLIDS DISPOSAL

Collected screenings, slurries, sludges, and other solids shall be disposed of in such a manner as to prevent entry of those wastes into waters of the state. For publicly owned treatment works, these shall be disposed of in accordance with the approved Ohio EPA Sludge Management Plan.

22. CONSTRUCTION AFFECTING NAVIGABLE WATERS

This permit does not authorize or approve the construction of any onshore or offshore physical structures or facilities or the undertaking of any work in any navigable waters.

23. CIVIL AND CRIMINAL LIABILITY

Except as exempted in the permit conditions on UNAUTHORIZED DISCHARGES or UPSETS, nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

24. STATE LAWS AND REGULATIONS

Nothing in this permit shall be construed to preclude the institution of any legal action nor relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the Clean Water Act.

25. PROPERTY RIGHTS

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

26. UPSET

The provisions of 40 CFR Section 122.41(n), relating to "Upset," are specifically incorporated herein by reference in their entirety. For definition of "upset," see Part III, Paragraph 1, DEFINITIONS.

27. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

28 SIGNATORY REQUIREMENTS

All applications submitted to the Director shall be signed and certified in accordance with the requirements of 40 CFR 122.22.

All reports submitted to the Director shall be signed and certified in accordance with the requirements of 40 CFR Section 122.22.

29. OTHER INFORMATION

A. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.

B. ORC 6111.99 provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $25,000 per violation.

C. ORC 6111.99 states that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than $25,000 per violation.

D. ORC 6111.99 provides that any person who violates Sections 6111.04, 6111.042, 6111.05, or division (A) of Section 6111.07 of the Revised Code shall be fined not more than $25,000 or imprisoned not more than one year, or both.

30. NEED TO HALT OR REDUCE ACTIVITY

40 CFR 122.41(c) states that it shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with conditions of this permit.

31. APPLICABLE FEDERAL RULES

All references to 40 CFR in this permit mean the version of 40 CFR which is effective as of the effective date of this permit.

32. AVAILABILITY OF PUBLIC SEWERS

Notwithstanding the issuance or non-issuance of an NPDES permit to a semi-public disposal system, whenever the sewage system of a publicly owned treatment works becomes available and accessible, the permittee operating any semi-public disposal system shall abandon the semi-public disposal system and connect it into the publicly owned treatment works.

Part IV. STORM WATER POLLUTION PREVENTION PLANS

A storm water pollution prevention plan (plan) shall be developed to address each outfall that discharges to waters of the state that contains storm water associated with industrial activity. Storm water pollution prevention plans shall be prepared in accordance with good engineering practices. The plan shall identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges associated with industrial activity from the facility. In addition, the plan shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in storm water discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit. Facilities must implement the provisions of the storm water pollution prevention plan required under this part as a condition of this permit.

A. Deadlines for Plan Preparation and Compliance.

1. The plan for a storm water discharge associated with industrial activity:

   a. shall be prepared within six months of the effective date of this permit (and updated as appropriate);
   b. shall provide for implementation and compliance with the terms of the plan within twelve months of the effective date of this permit.

2. Upon a showing of good cause, the Director may establish a later date for preparing and compliance with a plan for a storm water discharge associated with industrial activity.

B. Signature and Plan Review.

1. The plan shall be signed in accordance with Part VI, and be retained on-site at the facility which generates the storm water discharge.

2. The permittee shall make plans available upon request to the Ohio EPA Director, or authorized representative, or Regional Administrator of U.S. EPA, or in the case of a storm water discharge associated with industrial activity which discharges through a municipal separate storm sewer system, to the operator of the municipal system.

3. The Director may notify the permittee at any time that the plan does not meet one or more of the minimum requirements of this Part. Within 30 days of such notification from the Director, the permittee shall make the required changes to the plan and shall submit to the Director a written certification that the requested changes have been made.

4. All storm water pollution prevention plans required under this permit are considered reports that shall be available to the public under Section 308(b) of the Act. The permittee may claim any portion of a storm water pollution plan as confidential in accordance with 40 CFR Part 2 and does not have to release any portion of the plan describing facility security measures (such as provided for in Part IV.D.7.b.(8) of this permit). An interested party wishing a copy of a discharger's SWP3 will have to contact the Ohio EPA to obtain a copy.

C. Keeping Plans Current.

The permittee shall amend the plan whenever there is a change in design, construction, operation, or maintenance, that has a significant effect on the potential for the discharge of pollutants to the waters of the State or if the storm water pollution prevention plan proves to be ineffective in eliminating or significantly minimizing *pollutants from sources identified under Part IV.D.2 of this permit, or otherwise achieving the general objectives of controlling pollutants in storm water discharges associated with industrial activity.* Amendments to the plan may be reviewed by Ohio EPA in the same manner as Part IV.B above.

D. Contents of Plan. The plan shall include, at a minimum, the following items:

1. Pollution Prevention Team - Each plan shall identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team that are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.

2. Description of Potential Pollutant Sources. Each plan shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutants to storm water discharges or which may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. Each plan shall identify all activities and significant materials which may potentially be significant pollutant sources. Each plan shall include, at a minimum:

Part IV. STORM WATER POLLUTION PREVENTION PLANS (continued)

D. (continued)

a. Drainage.

(1) A site map indicating an outline of the drainage area of each storm water outfall, each existing structural control measure to reduce pollutants in storm water runoff, surface water bodies, locations where significant materials are exposed to precipitation, locations where major spills or leaks identified under Part IV.D.2.c of this permit have occurred, and the locations of the following activities where such activities are exposed to precipitation: fueling stations, vehicle

and equipment maintenance and/or cleaning areas, loading/unloading areas, locations used for the treatment, storage or disposal of wastes, liquid storage tanks, processing areas and storage areas.

(2) For each area of the facility that generates storm water discharges associated with industrial activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow, and an estimate of the types of pollutants which are likely to be present in storm water discharges associated with industrial activity. Flows with a significant potential for causing erosion shall be identified.

b. Inventory of Exposed Materials. An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of three years prior to the date of the issuance of this permit and the present; method and location of on-site storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of three years prior to the date of the issuance of this permit and the present; the location and a description of existing structural and non-structural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives.

c. Spills and Leaks. A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at the facility after the date of three years prior to the effective date of this permit.

d. Sampling Data. A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility.

e. Risk Identification and Summary of Potential Pollutant Sources. A narrative description of the potential pollutant sources at the following areas: loading and unloading operations; outdoor storage activities; outdoor manufacturing or processing activities; significant dust or particulate generating processes; and on-site waste disposal practices. The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g. biochemical oxygen demand, etc.) of concerns shall be identified.

3. Measures and Controls. Each facility covered by this permit shall develop a description of storm water management controls appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls:

a. Good Housekeeping - Good housekeeping requires the maintenance of a clean, orderly facility.

b. Preventive Maintenance - A preventive maintenance program shall involve inspection and maintenance of storm water management devices (e.g. cleaning oil/water separators, catch basins) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems.

c. Spill Prevention and Response Procedures - Areas where potential spills can occur, and their accompanying drainage points shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a clean up should be available to personnel.

Part IV. STORM WATER POLLUTION PREVENTION PLANS (continued)

D. (continued)

d. Inspections - In addition to or as part of the comprehensive site evaluation required under Part IV.4. of this permit, qualified facility personnel shall be identified to inspect designated equipment and areas of the facility at appropriate intervals specified in the plan. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained.

e. Employee Training - Employee training programs shall inform personnel at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping and material management practices. The plan shall identify periodic dates for such training.

f. Recordkeeping and Internal Reporting Procedures - A description of incidents such as spills, or other discharges, along with other information describing the quality and quantity of storm water discharges shall be included in the plan required under this part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan.

g. Non-Storm Water Discharges

(1) The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of any test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the on-site drainage points that were directly observed during the test. Such certification may not be feasible if the facility operating the storm water discharge associated with industrial activity does not have access to an outfall, manhole, or other point of access to the ultimate conduit which receives the discharge. In such cases, the source identification section of the storm water pollution plan shall indicate why the certification required by this part was not feasible, along with the identification of potential significant sources of non-storm water at the site. A discharger that is unable to provide the certification required by this paragraph must notify in accordance with Part IV.A of this permit.

(2) Except for flows from fire fighting activities, sources of non-storm water listed in Part VI of this permit that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

h. Sediment and Erosion Control - The plan shall identify areas which, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify measures to limit erosion.

i. Management of Runoff - The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those which control the source of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide that measures determined to be reasonable and appropriate shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity (see Parts IV.D.2.(b), (d) and (e) of this permit) shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: including vegetative swales and practices, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, and wet detention/retention devices.

4. Comprehensive Site Compliance Evaluation. Qualified personnel shall conduct site compliance evaluations at appropriate intervals specified in the plan, but, except as provided in paragraph IV.D.4.d, in no case less than once a year. Such evaluations shall provide:

a. Material handling areas and other potential sources of pollution identified in the plan in accordance with paragraph IV.D.2 of this permit shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Structural storm water management measures, sediment and control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.

Part IV. STORM WATER POLLUTION PREVENTION PLANS (continued)

D. (continued)

b. Based on the results of the inspection, the description of potential pollutant sources identified in the plan in accordance with paragraph IV.D.2 of this permit and pollution prevention measures and controls identified in the plan in accordance with paragraph IV.D.3 of this permit shall be revised as appropriate within two weeks of such inspection and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than twelve weeks after the inspection.

c. A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph IV.D.4.b of the permit shall be made and retained as part of the storm water pollution prevention plan for at least three years. The report shall be signed in accordance with Part VI.B of this permit.

5. Additional requirements for storm water discharges associated with industrial activity through municipal separate storm sewer systems serving a population of 100,000 or more.

In addition to the applicable requirements of this permit, facilities covered by this permit must comply with applicable requirements in municipal storm water management programs developed under NPDES permits issued for the discharge of the municipal separate storm sewer system that receives the facility's discharge, provided the discharger has been notified of such conditions.

6. Consistency with other plans. Storm water pollution prevention plans may reflect requirements for Spill Prevention Control and Countermeasure (SPCC) plans developed for the facility under section 311 of the Act or Best Management Practices (BMP) Programs otherwise required by a NPDES permit for the facility as long as such requirement is incorporated into the storm water pollution prevention plan.

7. Additional requirements for storm water discharges associated with industrial activity from facilities subject to SARA Title III, Section 313 requirements are not applicable to Section 313 water priority chemicals in gaseous or non-soluble liquid or solid [at atmospheric pressure and temperature] forms. In addition to the requirements of Parts IV.D.1 through 4 of this permit and other applicable conditions of this permit, storm water pollution prevention plans for facilities subject to reporting requirements under SARA Title III, Section 313 for chemicals which are classified as "Section 313 water priority chemicals" in accordance with the definition in Part VI of this permit, shall describe and ensure the implementation of practices which are necessary to provide for conformance with the following guidelines:

a. In areas where Section 313 water priority chemicals are stored, processed or otherwise handled, appropriate containment, drainage control and/or diversionary structures shall be provided. At a minimum, one of the following preventive systems or its equivalent shall be used:

(1) Curbing, culverting, gutters, sewers or other forms of drainage control to prevent or minimize the potential for storm water run-on to come into contact with significant sources of pollutants; or
(2) Roofs, covers or other forms of appropriate protection to prevent storage piles from exposure to storm water, and wind blowing.

b. In addition to the minimum standards listed under Part IV.D.7.a of this permit, the storm water pollution prevention plan shall include a complete discussion of measures taken to conform with the following applicable guidelines, other effective storm water pollution prevention procedures, and applicable State rules, regulations and guidelines:

(1) Liquid storage areas where storm water comes into contact with any equipment, tank, container, or other vessel used for Section 313 water priority chemicals.

(a) No tank or container shall be used for the storage of a Section 313 water priority chemical unless its material and construction are compatible with the material stored and conditions of storage such as pressure and temperature, etc.

(b) Liquid storage areas for Section 313 water priority chemicals shall be operated to minimize discharges of Section 313 chemicals. Appropriate measures to minimize discharges of Section 313 chemicals may include secondary containment provided for at least the entire contents of the largest single tank plus sufficient freeboard to allow for precipitation, a strong spill contingency and integrity testing plan, and/or other equivalent measures.

Part IV. STORM WATER POLLUTION PREVENTION PLANS (continued)

D. (continued)

(2) Material storage areas for Section 313 water priority chemicals other than liquids. Material storage areas for Section 313 water priority chemicals other than liquids which are subject to runoff, leaching, or wind blowing shall incorporate drainage or other control features which will minimize the discharge of Section 313 water priority chemicals by reducing storm water contact with Section 313 water priority chemicals.

(3) Truck and rail car loading and unloading areas for liquid Section 313 water priority chemicals. Truck and rail car loading and unloading areas for liquid Section 313 water priority chemicals shall be operated to minimize discharges of Section 313 water priority chemicals. Appropriate measures to minimize discharges of Section 313 chemicals may include: the placement and maintenance of drip pans where spillage may occur (such as hose connections, hose reels and filler nozzles) for use when making and breaking hose connections; a strong spill contingency and integrity testing plan; and/or other equivalent measures.

(4) In facility areas where Section 313 water priority chemicals are transferred, processed or otherwise handled. Processing equipment and materials handling equipment shall be operated so as to minimize discharges of Section 313 water priority chemicals. Materials used in piping and equipment shall be compatible with the substances handled. Drainage from process and materials handling areas shall be designed as described in paragraphs (a), (b) and (c) of this section. Additional protection such as covers or guards to prevent wind blowing, spraying or releases from pressure relief vents from causing a discharge of Section 313 water priority chemicals to the drainage system, and overhangs or door skirts to enclose trailer ends at truck loading/unloading docks shall be provided as appropriate. Visual inspections or leak tests shall be provided for overhead piping conveying Section 313 water priority chemicals without secondary containment.

(5) Discharges from areas covered by paragraphs (1), (2), (3) or (4).

(a) Drainage from areas covered by paragraphs (1), (2), (3) or (4) of this part should be restrained by valves or other positive means to prevent the discharge of a spill or other excessive leakage of Section 313 water priority chemicals. Where containment units are employed, such units may be emptied by pumps or ejectors; however, these shall be manually activated.

(b) Flapper-type drain valves shall not be used to drain containment areas. Valves used for the drainage of containment areas should, as far as is practical, be of manual, open-and-closed design.

(c) If facility drainage is not engineered as above, the final discharge of all in-facility storm sewers shall be equipped to be equivalent with a diversion system that could, in the event of an uncontrolled spill of Section 313 water priority chemicals, return the spilled material to the facility.

(d) Records shall be kept of the frequency and estimated volume (in gallons) of discharges from containment areas.

(6) Facility site runoff other than from areas covered by (1), (2), (3) or (4). Other areas of the facility (those not addressed in paragraphs (1), (2), (3) or (4)), from which runoff which may contain Section 313 water priority chemicals or spills of Section 313 water priority chemicals could cause a discharge shall incorporate the necessary drainage or other control features to prevent discharge of spilled or improperly disposed material and ensure the mitigation of pollutants in runoff or leachate.

Part IV. STORM WATER POLLUTION PREVENTION PLANS (continued)

D. (continued)

(7) Preventive maintenance and housekeeping. All areas of the facility shall be inspected at specific intervals for leaks or conditions that could lead to discharges of Section 313 water priority chemicals or direct contact of storm water with raw materials, intermediate materials, waste materials or products. In particular, facility piping, pumps, storage tanks and bins, pressure vessels, process and material handling equipment, and material bulk storage area shall be examined for any conditions or failures which could cause a discharge. Inspection shall include examination for leaks, wind blowing, corrosion, support or foundation failure, or other forms of deterioration or non-containment. Inspection intervals shall be specified in the plan and shall be based on design and operational experience. Different areas may require different inspection intervals. Where a leak or other condition is discovered which may result in significant releases of Section 313 water priority chemicals to the drainage system, corrective action shall be immediately taken or the unit or process shut down until corrective action can be taken. When a leak or non-containment of a Section 313 water priority chemical has occurred, contaminated soil, debris, or other material must be promptly removed and disposed in accordance with Federal, State, and local requirements and as described in the plan.

(8) Facility security. Facilities shall have the necessary security systems to prevent accidental or intentional entry which could cause a discharge. Security systems described in the plan shall address fencing, lighting, vehicular traffic control, and securing of equipment and buildings.

(9) Training. Facility employees and contractor personnel using the facility shall be trained in and informed of preventive measures at the facility. Employee training shall be conducted at intervals specified in the plan, but not less than once per year, in matters of pollution control laws and regulations, and in the storm water pollution prevention plan and the particular features of the facility and its operation which are designed to minimize discharges of Section 313 water priority chemicals. The plan shall designate a person who is accountable for spill prevention at the facility and who will set up the necessary spill emergency procedures and reporting requirements so that spills and emergency releases of Section 313 water priority chemicals can be isolated and contained before a discharge of a Section 313 water priority chemical can occur. Contractor or temporary personnel shall be informed of facility operation and design features in order to prevent discharges or spills from occurring.

8. Additional Requirements for Salt Storage. Storage piles of salt used for deicing or other commercial or industrial purposes and which generate a storm water discharge associated with industrial activity which is discharged to surface waters of the State shall be enclosed or covered to prevent exposure to precipitation, except for exposure resulting from adding or removing materials from the pile within two years of the effective date of this permit. Piles do not need to be enclosed or covered where storm water from the pile is not discharged to surface waters of the State.

Part V. NUMERIC EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

A. **Coal Pile Runoff Effluent Limitations.** Any discharge of coal pile runoff is authorized to discharge as of the effective date of this permit and shall comply with the following effluent limitations as expeditiously as practicable, but no later than three years after the effective date of this permit. Coal pile runoff shall not be diluted with storm water or other flow in order to meet these limitations.

Units	Parameter	Daily Minimum	Daily Maximum
mg/l	Total Suspended Solids	-	50
S.U.	pH	6.0	9.0

Any untreated overflow from facilities designed, constructed and operated to treat the volume of coal pile runoff which is associated with 10 year, 24-hour rainfall event shall not be subject to the limitation for Total Suspended Solids. It is the permittee's responsibility to demonstrate to the Ohio EPA that a 10-year, 24-hour rainfall event has occurred and the volume of the overflow to which the Total Suspended Solids effluent limitation does not apply.

B. **Monitoring Requirements.** Only the activities described in the following matrix and associated definitions are required to conduct monitoring. The monitoring required in the following matrix shall be conducted annually. Monitoring shall be initiated within twelve months of the effective date of this permit and henceforth on an annual basis, weather conditions permitting. A permittee may, in lieu of annual monitoring, certify that industrial materials are not exposed to storm water; such certification shall be submitted to the Ohio EPA upon request of the Director.

1. MONITORING REQUIREMENTS MATRIX

Reporting Units	Parameter	INDUSTRIAL ACTIVITY CATEGORIES											
		a	b[1,3]	c	d	e	f	g	h	i[2]	j	k	l[3]
mg/l	Oil and Grease		X	X	X	X	X	X	X	X	X	X	X
mg/l	5-day Biochemical Oxygen Demand		X							X		X	
mg/l	Chemical Oxygen Demand		X	X	X	X	X		X	X			X
mg/l	Total Suspended Solids		X		X	X	X	X	X	X	X	X	X
mg/l	Total Kjeldahl Nitrogen			X								X	
mg/l	Phosphorus											X	
S.U.	pH		X	X	X	X	X	X	X	X	X	X	X
TU$_a$	Acute Toxicity												
Hours	Duration of Storm Event		X	X	X	X	X	X	X	X	X	X	X
Inches	Precipitation		X	X	X	X	X	X	X	X	X	X	X
Hours	Duration Between Storm Events[4]		X	X	X	X	X	X	X	X	X	X	X
Gallons	Volume (est)		X	X	X	X	X	X	X	X	X	X	X
mg/l	Nitrate-Nitrogen												
mg/l	Nitrite-Nitrogen												
ug/l	Lead, Total		X	X					X				
ug/l	Cadmium, Total		X[5]	X									
ug/l	Copper, Total		X[5]				X	X	X		X		
ug/l	Arsenic, Total		X[5]	X			X						
ug/l	Chromium, Total		X[5]	X			X						
mg/l	Ammonia												
ug/l	Magnesium, Total			X									

Part V. NUMERIC EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

B. (continued)

Reporting Units	Parameter	INDUSTRIAL ACTIVITY CATEGORIES											
		a	b[1]	c	d	e	f	g	h	i[2]	j	k	l[3]
mg/l	Magnesium, Dissolved			X									
mg/l	Total Dissolved Solids			X									
mg/l	Total Organic Carbon			X									
ug/l	Barium, Total			X									
mg/l	Cyanide, Total			X									
ug/l	Mercury, Total			X									
ug/l	Selenium, Total			X									
ug/l	Silver, Total			X									
ug/l	Pentachlorophenol				X								
ug/l	Nickel, Total							X			X		
ug/l	Zinc, Total							X			X		
#/100ml	Fecal Coliform											X	

* Time between the storm event when sampling is being conducted and the last storm event producing rainfall greater than 0.1 inches.

(1) and any pollutant limited in an effluent guideline or categorical pretreatment standard which the facility is subject.

(2) and the primary ingredient used in the deicing materials used at the site (e.g., ethylene glycol, urea, etc.).

(3) Facilities that are classified as SIC 33 only because they manufacture pure silicon and/or semiconductor grade silicon are not required to monitor for this parameter.

2. Industrial Activity Categories Definitions

a. Section 313 of SARA Title III Facilities. As of the effective date of this permit, facilities with storm water discharges associated with industrial activity that are subject to requirements to report releases into the environment under Section 313 of SARA Title III for chemicals which are classified as 'Section 313 water priority chemicals' are not (as they may have been in a previous permit) required to monitor storm water that is discharged from the facility unless required by paragraphs V.B.2.b through B.2.l.

b. Primary Metal Industries. Facilities with storm water discharges associated with industrial activity classified as Standard Industrial Classification (SIC) 33 (Primary Metal Industry) are required to monitor such storm water that is discharged from the facility.

c. Land Disposal Units/Incinerators/BIFs. Facilities with storm water discharges associated with industrial activity from any active or inactive landfill, land application sites or open dump without a stabilized final cover that has received any industrial wastes from a facility with a Standard Industrial Classification (SIC) of between 20-39 (manufacturing); and incinerators (including Boilers and Industrial Furnaces (BIFs)) that burn hazardous waste and operate under interim status or a permit under Subtitle C of RCRA, are required to monitor such storm water that is discharged from the facility.

d. Wood Treatment Using Chlorophenolic Formulations. Facilities with storm water discharges associated with industrial activity from areas that are used for wood treatment, wood surface application or storage of treated or surface protected wood at any wood preserving or wood surface facilities are required to monitor such storm water that is discharged from the facility.

e. Wood Treatment Using Creosote Formulations. Facilities with storm water discharges associated with industrial activity from areas that are used for wood treatment, wood surface application or storage of treated or surface protected wood at any wood preserving or wood surface facilities are required to monitor such storm water that is discharged from the facility.

3. (continued)

f. Wood Treatment Using Chromium-Arsenic Formulations. Facilities with storm water discharges associated with industrial activity from areas that are used for wood treatment, wood surface application or storage of treated or surface protected wood at any wood preserving or wood surface facilities are required to monitor such storm water that is discharged from the facility.

g. Coal Pile Runoff. Facilities with storm water discharges associated with industrial activity from coal pile runoff are required to monitor such storm water that is discharged from the facility.

h. Battery Reclaimers. Facilities with storm water discharges associated with industrial activity from areas used for storage of lead acid batteries, reclamation products, or waste products, and areas used for lead acid battery reclamation (including material handling activities) at facilities that reclaim lead acid batteries are required to monitor such storm water that is discharged from the facility.

i. Airports. At airports with over 50,000 flight operations per year, facilities with storm water discharges associated with industrial activity from areas where aircraft or airport deicing operations occur (including runways, taxiways, ramps, and dedicated aircraft deicing stations) are required to monitor such storm water that is discharged from the facility.

j. Coal-fired Steam Electric Facilities. Facilities with storm water discharges associated with industrial activity from coal handling sites at coal fired steam electric power generating facilities (other than discharges in whole or in part from coal piles subject to storm water effluent guidelines at 40 CFR 423 - which are not eligible for coverage under this permit) are required to monitor such storm water that is discharged from the facility.

k. Animal Handling / Meat Packing. Facilities with storm water discharges associated with industrial activity from animal handling areas, manure management (or storage) areas, and production waste management (or storage) areas that are exposed to precipitation at meat packing plants, poultry packing plants, and facilities that manufacture animal and marine fats and oils, are required to monitor such storm water that is discharged from the facility.

l. Additional Facilities. Facilities with storm water discharges associated with industrial activity that:

(1) come in contact with storage piles for solid chemicals used as raw materials that are exposed to precipitation at facilities classified as SIC 30 (Rubber and Miscellaneous Plastics Products) or SIC 28 (Chemicals and Allied Products);

(2) are from those areas at automobile junkyards with any of the following: (A) over 250 auto/truck bodies with drivelines (engine, transmission, axles, and wheels), 250 drivelines, or any combination thereof (in whole or in parts) are exposed to storm water; (B) over 500 auto/truck units (bodies with or without drivelines in whole or in parts) are stored exposed to storm water; or (C) over 100 units per year are dismantled and drainage or storage of automotive fluids occurs in areas exposed to storm water;

(3) come into contact with lime storage piles that are exposed to storm water at lime manufacturing facilities;

(4) are from oil handling sites at oil fired steam electric power generating facilities;

(5) are from cement manufacturing facilities and cement kilns (other than discharges in whole or in part from material storage piles subject to storm water effluent guidelines at 40 CFR 411 - which are not eligible for coverage under this permit);

(6) are from ready-mixed concrete facilities; or

(7) are from ship building and repairing facilities;

are required to monitor such storm water discharged from the facility.

B. (continued)

3. Sample Type. Take a minimum of one grab sample from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first thirty minutes of the discharge. If the collection of a grab sample during the first thirty minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first thirty minutes was impracticable.

4. Sampling Waiver. When a discharger is unable to collect samples due to adverse climatic conditions, the discharger must submit in lieu of sampling data a description of why samples could not be collected, including available documentation of the event. Adverse climatic conditions which may prohibit the collection of samples includes weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

5. Representative Discharge. When a facility has two or more outfalls that, based on a consideration of features and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfalls. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area (e.g. low (under 40%), medium (40% to 65%) or high (above 65%)) shall be provided.

C. **Toxicity Testing.** Not Required.

D. **Alternative Certification of "Not Present or No Exposure."** You are not subject to the analytical monitoring requirement of this part provided: you make a certification for a given outfall, or on a pollutant-by-pollutant basis in lieu of monitoring required under this part, that material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, or significant materials from past industrial activity that are located in areas of the facility within the drainage area of the outfall are not presently exposed to storm water and are not expected to be exposed to storm water for the certification period; and your certification is signed in accordance with Attachment VI.G and retained in the SWP3. If you cannot certify for an entire period, you must note the date exposure was eliminated and perform any monitoring required up until that date.

Part VI. OTHER STORM WATER REQUIREMENTS, DEFINITIONS AND AUTHORIZATION

A. **Failure to Certify.** Any facility that is unable to provide the certification required under paragraph IV.D.3.g.(1) (testing for non-storm water discharges), must notify the Director within 180 days of the effective date of this permit. Such notification shall describe: the procedure of any test conducted for the presence of non-storm water discharges; the results of such test or other relevant observations; potential sources of non-storm water discharges to the storm sewer; and why adequate tests for such storm sewers were not feasible.

B. **Signatory Requirements.** See Part III.28.

C. **Definitions.**

"Section 313 water priority chemical" means a chemical or chemical categories which are: 1) are listed at 40 CFR 372.65 pursuant to Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986, also titled the Emergency Planning and Community Right-to-Know Act of 1986; 2) are present at or above threshold levels at a facility subject to SARA Title III, Section 313 reporting requirements; and 3) that meet at least one of the following criteria: (i) are listed in Appendix D of 40 CFR 122 on either Table II (organic priority pollutants), Table III (certain metals, cyanides, and phenols) or Table V (certain toxic pollutants and hazardous substances); (ii) are listed as a hazardous substance pursuant to section 311(b)(2)(A) of the Act at 40 CFR 116.4; or (iii) are pollutants for which EPA has published acute or chronic water quality criteria.

"Significant materials" includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical the facility is required to report pursuant to Section 313 of Title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges.

"Significant spills" includes, but is not limited to: releases of oil or hazardous substances in excess of reportable quantities under section 311 of the Clean Water Act (see 40 CFR 110.10 and CFR 117.21) or section 102 of CERCLA (see 40 CFR 302.4).

"Storm Water" means storm water runoff, snow melt runoff, and surface runoff and drainage.

"Definition of Storm Water Associated with Industrial Activity" means the discharge from any conveyance which is used for collecting and conveying storm water and which is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the NPDES program. For the categories of industries identified in subparagraphs (i) through (x) of this subsection, the term includes, but is not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined at 40 CFR 401); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and finished products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water. For the categories of industries identified in subparagraph (xi), the term includes only storm water discharges from all areas listed in the previous sentence (except access roads) where material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water. For the purposes of this paragraph, material handling activities include the: storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, finished product, by-product or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with storm water drained from the above described areas. Industrial facilities (including industrial facilities that are Federally or municipally owned or operated that meet the description of the facilities listed in this paragraph (i)-(xi)) include those facilities designated under 40 CFR 122.26(a)(1)(v). The following categories of facilities are considered to be engaging in "industrial activity" for purposes of this subsection:

(i) Facilities subject to storm water effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards under 40 CFR Subchapter N (except facilities with toxic pollutant effluent standards which are exempted under category (xi) of this paragraph);

(ii) Facilities classified as Standard Industrial Classifications 24 (except 2434), 26 (except 265 and 267), 28 (except 283 and 285) 29, 311, 32 (except 323), 33, 3441, 373;

C. (continued)

(iii) Facilities classified as Standard Industrial Classifications 10 through 14 (mineral industry) including active or inactive mining operations (except for areas of coal mining operations meeting the definition of a reclamation area under 40 CFR 434.11(l)) and oil and gas exploration, production, processing, or treatment operations, or transmission facilities that discharge storm water contaminated by contact with or that has come into contact with, any overburden, raw material, intermediate products, finished products, byproducts or waste products located on the site of such operations; inactive mining operations are mining sites that are not being actively mined, but which have an identifiable owner/operator;

(iv) Hazardous waste treatment, storage, or disposal facilities, including those that are operating under interim status or a permit under Subtitle C of RCRA;

(v) Landfills, land application sites, and open dumps that have received any industrial wastes (waste that is received from any of the facilities described under this subsection) including those that are subject to regulation under Subtitle D of RCRA;

(vi) Facilities involved in the recycling of materials, including metal scrapyards, battery reclaimers, salvage yards, and automobile junkyards, including but not limited to those classified as Standard Industrial Classification 5015 and 5093;

(vii) Steam electric power generating facilities, including coal handling sites;

(viii) Transportation facilities classified as Standard Industrial Classifications 40, 41, 42 (except 4221-25), 43, 44, 45, and 5171 which have vehicle maintenance shops, equipment cleaning operations, or airport deicing operations. Only those portions of the facility that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, airport deicing operations, or which are otherwise identified under paragraphs (i)-(vii) or (ix)-(xi) of this subsection are associated with industrial activity;

(ix) Treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that are located within the confines of the facility, with a design flow of 1.0 mgd or more, or required to have an approved pretreatment program under 40 CFR 403. Not included are farm lands, domestic gardens or lands used for sludge management where sludge is beneficially reused and which are not physically located in the confines of the facility, or areas that are in compliance with 40 CFR 503;

(x) Construction activity - This category of industrial activity is not regulated under this permit.

(xi) Facilities under Standard Industrial Classifications 20, 21, 22, 23, 2434, 25, 265, 267, 27, 283, 285, 30, 31 (except 311), 34 (except 3441), 35, 36, 37 (except 373), 38, 39, 4221-25, (and which are not otherwise included within categories (ii)-(x)).

"SWPPP" means storm water pollution prevention plan to be completed as a condition of this permit (see Part IV of this permit).

"Time-weighted composite" means a composite sample consisting of a mixture of equal volume aliquots collected at a constant time interval.

"Waste pile" means any non-containerized accumulation of solid, non-flowing waste that is used for treatment or storage.

"10-year, 24-hour precipitation event" means the maximum 24-hour precipitation event with a probable reoccurrence interval of once in 10 years. This information is available in "Weather Bureau Technical Paper No. 40,", May 1961 and "NOAA Atlas 2," 1973 for the 11 Western States, and may be obtained from the National Climatic Center of the Environmental Data Service, National Oceanic and Atmospheric Administration, U.S. Department of Commerce.

"Bypass" means the intentional diversion of waste streams from any portion of the treatment facility.

"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

#11

OhioEPA
State of Ohio Environmental Protection Agency

STREET ADDRESS:
Lazarus Government Center
50 W. Town St., Suite 700
Columbus, Ohio 43215

TELE: (614) 644-3020 FAX: (614) 644-3184
www.epa.state.oh.us

MAILING ADDRESS:
P.O. Box 1049
Columbus, OH 43216-1049

March 20, 2008

CHRYSLER DOCUMENT CONTROL NO.
SC001. 03252008.001

Greg M. Rose
Chrysler LLC
800 Chrysler Drive CIMS 482-00-51
Auburn Hills, Michigan 48326-2757

CERTIFIED MAIL
91710821333931097305 45

Re: Dayton Thermal Products
Ohio Permit Number: UIC 05-57-10-PTO-V

Dear Mr. Rose:

The application submitted for an Underground Injection Control (UIC) Class V 5X26 Area Permit to Operate has been reviewed by Ohio EPA's Division of Drinking and Ground Waters, Underground Injection Control Unit. The UIC Unit has recommended that the Director issue the above referenced Class V Permit as your proposal complies with all applicable Ohio UIC Rules.

Therefore, a Class V 5X26 Area Permit to to Operate is issued to you today in **FINAL** form. This permit is effective on the date of issuance. A signed copy of the final permit is enclosed.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of $70.00 which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, OH 43215

If you should have any questions, please do not hesitate to contact Lindsay Taliaferro III, UIC Manager or Valerie Orr of my staff at (614) 644-2752.

Sincerely,

Michael G. Baker, Chief
Division of Drinking and Ground Waters

MGB:vo
daytonthermalissuance.doc

Enclosures

cc: Lindsay Taliaferro III, Manager, UIC
Gary Stanczuk, Chrysler LLC

OHIO ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF DRINKING AND GROUND WATERS
UNDERGROUND INJECTION CONTROL 5X26 AREA PERMIT TO OPERATE CLASS V INJECTION WELLS

Ohio Permit No. UIC 05-57-10-PTO-V

Applicant: Chrysler LLC

Address: 1000 Chrysler Drive
Auburn Hills Michigan 48326

Telephone: (248) 576-7365

Facility Name: Dayton Thermal Products

Facility Location: 1600 Webster Street, Dayton, Ohio

Latitude 39° 46' 57.3", Longitude 84° 10' 55.6"
South Plant: Section 5, North Plant: Section 6, T1 R7

Montgomery County

Description: The purpose of the injection is to create a ground water containment system to prevent the off-site migration of chlorinated volatile organic compounds and establish hydraulic control of ground water flow at the site. In addition, the reinjected ground water will be augmented with sodium lactate to promote the reductive dechlorination of the chlorinated volatile organic compounds present in the aquifer.

Issuance Date: March 20, 2008

Effective Date: March 20, 2008

Expiration Date: March 20, 2013

I certify this to be a true and accurate copy of the official documents as filed in the records of the Ohio Environmental Protection Agency.

By: _____ **Date:** 3-20-08

The above named applicant is hereby ISSUED a 5X26 Area Permit to Operate for the above described underground injection wells pursuant to Sections 6111.043 and 6111.044 of the Ohio Revised Code and to Chapter 3745-34 of the Ohio Administrative Code. Issuance of this 5X26 Area Permit to Operate does not constitute expressed or implied approval or agreement that, if constructed and/or modified in accordance with the specifications and/or information accompanying the permit application, the above described activity will be in compliance with applicable State and Federal laws and rules and regulations. This 5X26 Area Permit to Operate is issued subject to the attached conditions which are hereby incorporated and made a part hereof.

Expiration Date: This permit shall expire at midnight on the expiration date indicated above, unless terminated or modified under Chapter 3745-34 of the Ohio Administrative Code.

Chris Korleski, Director
OHIO ENVIRONMENTAL PROTECTION AGENCY

PART I
GENERAL PERMIT COMPLIANCE

A. EFFECT OF PERMIT

The permittee is authorized to engage in the operation of 5X26 Class V underground injection wells in accordance with Chapter 3745-34 of the Ohio Administrative Code (OAC) and the conditions of this permit. Notwithstanding any other provisions of this permit, the permittee shall not construct, operate, maintain, convert, plug, abandon, or conduct any other injection activity in a manner that allows the movement of injection or formation fluids into underground sources of drinking water (USDWs) if the presence of that material may cause a violation of any primary drinking water regulation under OAC Chapter 3745-81 or may otherwise adversely affect the health of persons. Any underground injection activity not specifically authorized in this permit is prohibited. Compliance with this permit during its term constitutes compliance for purposes of enforcement, with Sections 6111.043 and 6111.044 of the Ohio Revised Code (ORC). Such compliance does not constitute a defense to any action brought under ORC Sections 6109.31, 6109.32 or 6109.33 or any other common or statutory law other than ORC Sections 6111.043 and 6111.044. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of state or local law. Nothing in this permit shall be construed to relieve the permittee of any duties under applicable state and federal law, regulations, or permits.

B. PERMIT ACTIONS

1. Modification, Revocation, Reissuance and Termination. The Director may, for cause or upon request from the permittee, modify, revoke and reissue, or terminate this permit in accordance with OAC Rules 3745-34-07, 3745-34-23, and 3745-34-24. Also, the permit is subject to minor modifications for cause as specified in OAC Rule 3745-34-25. The filing of a request for a permit modification, revocation and reissuance, or termination, or the notification of planned changes, or anticipated noncompliance on the part of the permittee does not stay the applicability or enforceability of any permit condition.

2. Transfer of Permit. This permit may be transferred to a new owner or operator only if it is modified or revoked and reissued pursuant to OAC Rule 3745-34-22(A), 3745-34-23, 3745-34-24, 3745-34-25(D) or 3745-34-26(L)(3), as applicable.

C. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to any other circumstances and the remainder of this permit shall not be affected thereby.

D. CONFIDENTIALITY

In accordance with OAC Rule 3745-34-03 any information submitted to the Ohio EPA pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission by stamping words "confidential business information" on each page containing such information. If no claim is made at the time of submission, the Ohio EPA may make the information available to the public without further notice. If a claim is asserted, documentation for the claim must be tendered and the validity of the claim will be assessed in accordance with the procedures in OAC Rule 3745-34-03. If the documentation for the claim of confidentiality is not received, the Ohio EPA may deny the claim without further inquiry. Claims of confidentiality for the following information will be denied:

1. The name and address of the permittee;

2. Information which deals with the existence, absence or level of contaminants in receiving water.

E. DUTIES AND REQUIREMENTS (OAC RULE 3745-34-26)

1. Duty to Comply. The permittee shall comply with all applicable UIC regulations and conditions of this permit, issued in accordance with OAC Rule 3745-34-19. Any permit noncompliance constitutes a violation of ORC Chapter 6109. or 6111. and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application. Such noncompliance also may be grounds for enforcement action under other applicable state and federal law.

2. Penalties for Violations of Permit Conditions. Any person who violates a permit requirement is subject to injunctive relief, civil penalties, fines and/or other enforcement action under ORC Chapters 6111., 6109., or 3734. Any person who knowingly or recklessly violates permit conditions may be subject to criminal prosecution.

3. Continuation of Expiring Permits.
Duty to Reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall submit a complete application for a new permit at least 180 days before expiration of this permit.

4. Need to Halt or Reduce Activity Not a Defense. It shall not be a defense, for a permittee in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of these permits.

5 Duty to Mitigate. The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit.

6. Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of these permits. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this permit.

7. Duty to Provide Information. The permittee shall furnish to the Director, within a time specified, any information which the Director may request in order to determine whether cause exists for renewing, modifying, revoking and reissuing, or terminating this permit. To determine compliance with this permit, or to issue a new permit the permittee shall furnish to the Director, upon request, copies of all records required to be kept by this permit.

8. Inspection and Entry. The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law to:

   a. Enter permittee's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this permit;

   b. Have access at reasonable times to and copy any records that are kept under the conditions of this permit;

   c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

   d. Sample or monitor at reasonable times for the purposes of assuring permit compliance or as otherwise authorized by ORC Chapter 6111. and OAC Chapter 3745-34, any substances or parameters at any location.

9. Records.

   a. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all reports required by this permit for a period of at least five (5) years from the date of the sample, measurement or report or for the duration of the permitted life of the wells, whichever is longer.

   b. The permittee shall maintain records of all data required to complete the permit application forms for permits and any supplemental information submitted under OAC Rule 3745-34-16 for a period of at least five (5) years from the date the applications were signed. These periods may be extended by request of the Director during that period of time.

c. The permittee shall retain records concerning the nature and composition of all injected fluids for three (3) years after the project has been completed.

d. The permittee shall continue to retain such records after the retention period specified by paragraphs (a) to (c) above, unless he delivers the records to the Director or obtains written approval from the Director to discard the records.

e. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

f. Records of monitoring information shall include the following as applicable pursuant to OAC Rule 3745-34-26(J)(3):

i. The date, exact place, and time of sampling or measurements;

ii. The name(s) of the individual(s) who performed the sampling or measurements;

iii. A precise description of sampling methodology;

iv. The date(s) analyses or measurements were performed;

v. The name(s) of the individual(s) who performed the analyses or measurements and the laboratory that performed the analyses or measurements;

vi. The analytical techniques or methods used; and

vii. All results of such analyses.

10. Signatory Requirements. All reports or other information, required to be submitted by this permit or requested by the Director, shall be signed and certified in accordance with OAC Rule 3745-34-17.

11. Reporting Requirements.

a. Planned Changes. The permittee shall give written notice to the Director, as soon as possible, of any planned physical alterations or additions to the permitted facility. Within ten (10) days of the verbal notification, or of the commencement of construction, the permittee shall give written notice to the Director with justification of any planned physical alterations to the permitted well(s).

b. Anticipated Noncompliance. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

c. Compliance Schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of these permits shall be submitted no later than thirty (30) days following each schedule date.

d. Twenty-four (24) Hour Reporting.

1. The permittee shall report to the Director any noncompliance which may endanger health or the environment. Appropriate information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which must be reported orally within 24 hours:

i. Any monitoring or other information which indicates that any contaminant may cause an endangerment to an underground source of drinking water.

ii. Any noncompliance with a permit condition, or malfunction of the injection system, which may cause unpermitted fluid migration into or between underground sources of drinking water.

2. A written submission also shall be provided within five (5) business days of the time the permittee becomes aware of the circumstances of such noncompliance. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, the anticipated time it is expected to continue; and if the noncompliance has or has not been corrected, and steps taken or planned to reduce, eliminate and prevent recurrence of the noncompliance.

e. Other Noncompliance. The permittee shall report all other instances of noncompliance not otherwise reported at the time monitoring reports are submitted. The reports shall contain the information listed in permit condition 11(d)(2) above.

f. Other Information. When the permittee becomes aware of failure to submit any relevant facts in the permit applications or that incorrect information was submitted in a permit application or in any report to the Director, the permittee shall submit such facts and corrected information within ten (10) days.

g. The Director shall be notified immediately, in writing, if the person responsible for certification of documents pursuant to OAC Rule 3745-34-17 is changed.

F. PLUGGING AND ABANDONMENT

1. Plan for Plugging and Abandonment. Before any well installed pursuant to this permit is taken out of service, the permittee shall submit to the Ohio Environmental Protection Agency a plan for the plugging and abandonment of such well. The required plan shall specify procedures and contain such other provisions as are necessary to ensure that no movement of fluids into an underground source of drinking water is allowed. After review and acceptance of this plan by the Ohio Environmental Protection Agency, that plan shall automatically become a condition of this permit.

2. Abandonment Requirements. Injection wells declared as temporarily abandoned shall be maintained in strict compliance with Rule 3745-9-09 of the OAC to ensure that the well will not endanger underground sources of drinking water during the period of temporary abandonment. Injection wells declared as permanently abandoned shall be plugged in accordance with Rule 3745-9-10(C) of the OAC.

3. Plugging Report. Within 30 days after plugging the well, the permittee shall submit a plugging report to the Director. The report shall be certified as accurate by the person who performed the plugging operation and shall contain a statement defining the plugging procedure.

G. CORRECTIVE ACTION

1. Should routine monitoring or any other information indicate that primary drinking water standards as defined in Chapter 3745-81 of the OAC are, or may be, exceeded in any underground source of drinking water beyond the property boundary, or any monitored or other parameters are being significantly degraded in underground sources of drinking water not permitted for underground injection and as a consequence of the injection well operation, the permittee shall develop a corrective action plan. Such plan must include a determination of the nature, rate, and extent of the degradation. The plan may also be required to include appropriate remedial actions such as: additional chemical treatment, discontinuance of injection operations and/or others yet to be determined.

2. The plan for corrective action shall be submitted to the Director within 30 days of the date that indications of a violation of Chapter 3745-81 are noted, and are subject to approval by the Ohio EPA prior to implementation.

PART II
SPECIAL CONDITIONS

A. WELL OPERATION

1. Injection Zone. The injection zone is the Upper Great Miami Buried Valley Aquifer.

2. Injectate Quality Limits. Injectate shall be comprised of extracted ground water amended with sodium lactate. Constituents present in reinjected ground water shall not exceed the following limits:

1,1,1-Trichloroethane	0.480 mg/l
1,1-Dichloroethene	0.116 mg/l
1,2-Dichloroethane	0.010 mg/l
Carbon Tetratchloride	0.010 mg/l
Cis-1, 2-Dichloroethene	0.360 mg/l
Tetrachloroethene	0.560 mg/l
Trichloroethene	1.720 mg/l
Vinyl Chloride	0.044 mg/l

If at any time analyses indicate that the constituent limits established for reinjected ground water have been exceeded, the Director shall require that the permittee take corrective actions to bring the injected fluids back within the limits established in these permits. Further injection will be prohibited until the permittee adequately demonstrates that the exceedance has been corrected.

3. Injection Rate.

The maximum injection rate per well shall not exceed 100 gallons per minute (gpm).

B. MONITORING

1. Injected Fluids. To be monitored:

   a. Daily for average rate and injection volume; reported monthly;

   b. Monthly for 1,1,1-Trichloroethane; 1,1-Dichloroethene; 1,2-Dichloroethane; Carbon Tetratchloride; Cis-1, 2-Dichloroethene; Tetrachloroethene; Trichloroethene; and Vinyl Chloride; reported monthly;

   c. Quarterly for 1,2-Dichloropropane and 1,1,2-Trichloroethane; reported quarterly.

   d. Annually for Antimony; Arsenic; Barium; Cadmium; Chromium; Cyanide; Lead; Mercury; and Selenium; reported annually.

C. REPORTING

The permittee shall submit monitoring reports to the Ohio EPA, Division of Drinking and Ground Waters, Underground Injection Control Unit by the 15th day of the month following each month that monitoring results are required in accordance with schedules described in Part II(B) of this permit at the following address:

Ohio EPA
Division of Drinking and Ground Waters
Underground Injection Control Unit
Lazarus Government Center
50 West Town Street, Suite 700
P.O. Box 1049
Columbus, Ohio 43216-1049

Reports shall contain information regarding types of tests and methods used to generate monitoring data, as specified in Part I (E)(10) of this permit.

D. AGENCY INVOLVEMENT

Personnel from the Ohio EPA have unrestricted right of entry to the wells, as detailed in Part I (E)(8) of this permit.

OhioEPA
State of Ohio Environmental Protection Agency

STREET ADDRESS:
Lazarus Government Center
50 W Town St., Suite 700
Columbus, Ohio 43215

TELE: (614) 644-3020 FAX: (614) 644-3184
www.epa.state.oh.us

MAILING ADDRESS:
P.O. Box 1049
Columbus, OH 43216-1049

March 20, 2008

CHRYSLER DOCUMENT CONTROL NO.
SC001,03252008.001

Greg M. Rose
Chrysler LLC
800 Chrysler Drive CIMS 482-00-51
Auburn Hills, Michigan 48326-2757

CERTIFIED MAIL
91710821333931097305 45

Re: Dayton Thermal Products
Ohio Permit Number: UIC 05-57-10-PTO-V

Dear Mr. Rose:

The application submitted for an Underground Injection Control (UIC) Class V 5X26 Area Permit to Operate has been reviewed by Ohio EPA's Division of Drinking and Ground Waters, Underground Injection Control Unit. The UIC Unit has recommended that the Director issue the above referenced Class V Permit as your proposal complies with all applicable Ohio UIC Rules.

Therefore, a Class V 5X26 Area Permit to to Operate is issued to you today in **FINAL** form. This permit is effective on the date of issuance. A signed copy of the final permit is enclosed.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of $70.00 which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, OH 43215

If you should have any questions, please do not hesitate to contact Lindsay Taliaferro III, UIC Manager or Valerie Orr of my staff at (614) 644-2752.

Sincerely,

Michael G. Baker, Chief
Division of Drinking and Ground Waters

MGB:vo
daytonthermalissuance.doc

Enclosures

cc: Lindsay Taliaferro III, Manager, UIC
Gary Stanczuk, Chrysler LLC

OHIO ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF DRINKING AND GROUND WATERS
UNDERGROUND INJECTION CONTROL 5X26 AREA PERMIT TO OPERATE CLASS V INJECTION WELLS

Ohio Permit No. UIC 05-57-10-PTO-V

Applicant: Chrysler LLC

Address: 1000 Chrysler Drive
Auburn Hills Michigan 48326

Telephone: (248) 576-7365

Facility Name: Dayton Thermal Products

Facility Location: 1600 Webster Street, Dayton, Ohio

Latitude 39° 46' 57.3", Longitude 84° 10' 55.6"
South Plant: Section 5, North Plant: Section 6, T1 R7

Montgomery County

Description: The purpose of the injection is to create a ground water containment system to prevent the off-site migration of chlorinated volatile organic compounds and establish hydraulic control of ground water flow at the site. In addition, the reinjected ground water will be augmented with sodium lactate to promote the reductive dechlorination of the chlorinated volatile organic compounds present in the aquifer.

Issuance Date: March 20, 2008

Effective Date: March 20, 2008

Expiration Date: March 20, 2013

I certify this to be a true and accurate copy of the official documents as filed in the records of the Ohio Environmental Protection Agency.

By: _____ **Date:** 3-20-08

The above named applicant is hereby ISSUED a 5X26 Area Permit to Operate for the above described underground injection wells pursuant to Sections 6111.043 and 6111.044 of the Ohio Revised Code and to Chapter 3745-34 of the Ohio Administrative Code. Issuance of this 5X26 Area Permit to Operate does not constitute expressed or implied approval or agreement that, if constructed and/or modified in accordance with the specifications and/or information accompanying the permit application, the above described activity will be in compliance with applicable State and Federal laws and rules and regulations. This 5X26 Area Permit to Operate is issued subject to the attached conditions which are hereby incorporated and made a part hereof.

Expiration Date: This permit shall expire at midnight on the expiration date indicated above, unless terminated or modified under Chapter 3745-34 of the Ohio Administrative Code.

Chris Korleski, Director
OHIO ENVIRONMENTAL PROTECTION AGENCY

PART I
GENERAL PERMIT COMPLIANCE

A. EFFECT OF PERMIT

The permittee is authorized to engage in the operation of 5X26 Class V underground injection wells in accordance with Chapter 3745-34 of the Ohio Administrative Code (OAC) and the conditions of this permit. Notwithstanding any other provisions of this permit, the permittee shall not construct, operate, maintain, convert, plug, abandon, or conduct any other injection activity in a manner that allows the movement of injection or formation fluids into underground sources of drinking water (USDWs) if the presence of that material may cause a violation of any primary drinking water regulation under OAC Chapter 3745-81 or may otherwise adversely affect the health of persons. Any underground injection activity not specifically authorized in this permit is prohibited. Compliance with this permit during its term constitutes compliance for purposes of enforcement, with Sections 6111.043 and 6111.044 of the Ohio Revised Code (ORC). Such compliance does not constitute a defense to any action brought under ORC Sections 6109.31, 6109.32 or 6109.33 or any other common or statutory law other than ORC Sections 6111.043 and 6111.044. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of state or local law. Nothing in this permit shall be construed to relieve the permittee of any duties under applicable state and federal law, regulations, or permits.

B. PERMIT ACTIONS

1. Modification, Revocation, Reissuance and Termination. The Director may, for cause or upon request from the permittee, modify, revoke and reissue, or terminate this permit in accordance with OAC Rules 3745-34-07, 3745-34-23, and 3745-34-24. Also, the permit is subject to minor modifications for cause as specified in OAC Rule 3745-34-25. The filing of a request for a permit modification, revocation and reissuance, or termination, or the notification of planned changes, or anticipated noncompliance on the part of the permittee does not stay the applicability or enforceability of any permit condition.

2. Transfer of Permit. This permit may be transferred to a new owner or operator only if it is modified or revoked and reissued pursuant to OAC Rule 3745-34-22(A), 3745-34-23, 3745-34-24, 3745-34-25(D) or 3745-34-26(L)(3), as applicable.

C. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to any other circumstances and the remainder of this permit shall not be affected thereby.

D. CONFIDENTIALITY

In accordance with OAC Rule 3745-34-03 any information submitted to the Ohio EPA pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission by stamping words "confidential business information" on each page containing such information. If no claim is made at the time of submission, the Ohio EPA may make the information available to the public without further notice. If a claim is asserted, documentation for the claim must be tendered and the validity of the claim will be assessed in accordance with the procedures in OAC Rule 3745-34-03. If the documentation for the claim of confidentiality is not received, the Ohio EPA may deny the claim without further inquiry. Claims of confidentiality for the following information will be denied:

1. The name and address of the permittee;

2. Information which deals with the existence, absence or level of contaminants in receiving water.

E. DUTIES AND REQUIREMENTS (OAC RULE 3745-34-26)

1. Duty to Comply. The permittee shall comply with all applicable UIC regulations and conditions of this permit, issued in accordance with OAC Rule 3745-34-19. Any permit noncompliance constitutes a violation of ORC Chapter 6109. or 6111. and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application. Such noncompliance also may be grounds for enforcement action under other applicable state and federal law.

2. Penalties for Violations of Permit Conditions. Any person who violates a permit requirement is subject to injunctive relief, civil penalties, fines and/or other enforcement action under ORC Chapters 6111., 6109., or 3734. Any person who knowingly or recklessly violates permit conditions may be subject to criminal prosecution.

3. Continuation of Expiring Permits.
Duty to Reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall submit a complete application for a new permit at least 180 days before expiration of this permit.

4. Need to Halt or Reduce Activity Not a Defense. It shall not be a defense, for a permittee in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of these permits.

5. Duty to Mitigate. The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit.

6. Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of these permits. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this permit.

7. Duty to Provide Information. The permittee shall furnish to the Director, within a time specified, any information which the Director may request in order to determine whether cause exists for renewing, modifying, revoking and reissuing, or terminating this permit. To determine compliance with this permit, or to issue a new permit the permittee shall furnish to the Director, upon request, copies of all records required to be kept by this permit.

8. Inspection and Entry. The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law to:

   a. Enter permittee's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this permit;

   b. Have access at reasonable times to and copy any records that are kept under the conditions of this permit;

   c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

   d. Sample or monitor at reasonable times for the purposes of assuring permit compliance or as otherwise authorized by ORC Chapter 6111. and OAC Chapter 3745-34, any substances or parameters at any location.

9. Records.

   a. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all reports required by this permit for a period of at least five (5) years from the date of the sample, measurement or report or for the duration of the permitted life of the wells, whichever is longer.

   b. The permittee shall maintain records of all data required to complete the permit application forms for permits and any supplemental information submitted under OAC Rule 3745-34-16 for a period of at least five (5) years from the date the applications were signed. These periods may be extended by request of the Director during that period of time.

c. The permittee shall retain records concerning the nature and composition of all injected fluids for three (3) years after the project has been completed.

d. The permittee shall continue to retain such records after the retention period specified by paragraphs (a) to (c) above, unless he delivers the records to the Director or obtains written approval from the Director to discard the records.

e. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

f. Records of monitoring information shall include the following as applicable pursuant to OAC Rule 3745-34-26(J)(3):

i. The date, exact place, and time of sampling or measurements;

ii. The name(s) of the individual(s) who performed the sampling or measurements;

iii. A precise description of sampling methodology;

iv. The date(s) analyses or measurements were performed;

v. The name(s) of the individual(s) who performed the analyses or measurements and the laboratory that performed the analyses or measurements;

vi. The analytical techniques or methods used; and

vii. All results of such analyses.

10. Signatory Requirements. All reports or other information, required to be submitted by this permit or requested by the Director, shall be signed and certified in accordance with OAC Rule 3745-34-17.

11. Reporting Requirements.

a. Planned Changes. The permittee shall give written notice to the Director, as soon as possible, of any planned physical alterations or additions to the permitted facility. Within ten (10) days of the verbal notification, or of the commencement of construction, the permittee shall give written notice to the Director with justification of any planned physical alterations to the permitted well(s).

b. Anticipated Noncompliance. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

c. Compliance Schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of these permits shall be submitted no later than thirty (30) days following each schedule date.

d. Twenty-four (24) Hour Reporting.

1. The permittee shall report to the Director any noncompliance which may endanger health or the environment. Appropriate information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which must be reported orally within 24 hours:

i. Any monitoring or other information which indicates that any contaminant may cause an endangerment to an underground source of drinking water.

ii. Any noncompliance with a permit condition, or malfunction of the injection system, which may cause unpermitted fluid migration into or between underground sources of drinking water.

2. A written submission also shall be provided within five (5) business days of the time the permittee becomes aware of the circumstances of such noncompliance. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, the anticipated time it is expected to continue; and if the noncompliance has or has not been corrected, and steps taken or planned to reduce, eliminate and prevent recurrence of the noncompliance.

e. Other Noncompliance. The permittee shall report all other instances of noncompliance not otherwise reported at the time monitoring reports are submitted. The reports shall contain the information listed in permit condition 11(d)(2) above.

f. Other Information. When the permittee becomes aware of failure to submit any relevant facts in the permit applications or that incorrect information was submitted in a permit application or in any report to the Director, the permittee shall submit such facts and corrected information within ten (10) days.

g. The Director shall be notified immediately, in writing, if the person responsible for certification of documents pursuant to OAC Rule 3745-34-17 is changed.

F. PLUGGING AND ABANDONMENT

1. Plan for Plugging and Abandonment. Before any well installed pursuant to this permit is taken out of service, the permittee shall submit to the Ohio Environmental Protection Agency a plan for the plugging and abandonment of such well. The required plan shall specify procedures and contain such other provisions as are necessary to ensure that no movement of fluids into an underground source of drinking water is allowed. After review and acceptance of this plan by the Ohio Environmental Protection Agency, that plan shall automatically become a condition of this permit.

2. Abandonment Requirements. Injection wells declared as temporarily abandoned shall be maintained in strict compliance with Rule 3745-9-09 of the OAC to ensure that the well will not endanger underground sources of drinking water during the period of temporary abandonment. Injection wells declared as permanently abandoned shall be plugged in accordance with Rule 3745-9-10(C) of the OAC.

3. Plugging Report. Within 30 days after plugging the well, the permittee shall submit a plugging report to the Director. The report shall be certified as accurate by the person who performed the plugging operation and shall contain a statement defining the plugging procedure.

G. CORRECTIVE ACTION

1. Should routine monitoring or any other information indicate that primary drinking water standards as defined in Chapter 3745-81 of the OAC are, or may be, exceeded in any underground source of drinking water beyond the property boundary, or any monitored or other parameters are being significantly degraded in underground sources of drinking water not permitted for underground injection and as a consequence of the injection well operation, the permittee shall develop a corrective action plan. Such plan must include a determination of the nature, rate, and extent of the degradation. The plan may also be required to include appropriate remedial actions such as: additional chemical treatment, discontinuance of injection operations and/or others yet to be determined.

2. The plan for corrective action shall be submitted to the Director within 30 days of the date that indications of a violation of Chapter 3745-81 are noted, and are subject to approval by the Ohio EPA prior to implementation.

PART II
SPECIAL CONDITIONS

A. WELL OPERATION

1. Injection Zone. The injection zone is the Upper Great Miami Buried Valley Aquifer.

2. Injectate Quality Limits. Injectate shall be comprised of extracted ground water amended with sodium lactate. Constituents present in reinjected ground water shall not exceed the following limits:

1,1,1-Trichloroethane	0.480 mg/l
1,1-Dichloroethene	0.116 mg/l
1,2-Dichloroethane	0.010 mg/l
Carbon Tetratchloride	0.010 mg/l
Cis-1, 2-Dichloroethene	0.360 mg/l
Tetrachloroethene	0.560 mg/l
Trichloroethene	1.720 mg/l
Vinyl Chloride	0.044 mg/l

If at any time analyses indicate that the constituent limits established for reinjected ground water have been exceeded, the Director shall require that the permittee take corrective actions to bring the injected fluids back within the limits established in these permits. Further injection will be prohibited until the permittee adequately demonstrates that the exceedance has been corrected.

3. Injection Rate.

The maximum injection rate per well shall not exceed 100 gallons per minute (gpm).

B. MONITORING

1. Injected Fluids. To be monitored:

   a. Daily for average rate and injection volume; reported monthly;

   b. Monthly for 1,1,1-Trichloroethane; 1,1-Dichloroethene; 1,2-Dichloroethane; Carbon Tetratchloride; Cis-1, 2-Dichloroethene; Tetrachloroethene; Trichloroethene; and Vinyl Chloride; reported monthly;

   c. Quarterly for 1,2-Dichloropropane and 1,1,2-Trichloroethane; reported quarterly.

   d. Annually for Antimony; Arsenic; Barium; Cadmium; Chromium; Cyanide; Lead; Mercury; and Selenium; reported annually.

C. REPORTING

The permittee shall submit monitoring reports to the Ohio EPA, Division of Drinking and Ground Waters, Underground Injection Control Unit by the 15th day of the month following each month that monitoring results are required in accordance with schedules described in Part II(B) of this permit at the following address:

Ohio EPA
Division of Drinking and Ground Waters
Underground Injection Control Unit
Lazarus Government Center
50 West Town Street, Suite 700
P.O. Box 1049
Columbus, Ohio 43216-1049

Reports shall contain information regarding types of tests and methods used to generate monitoring data, as specified in Part I (E)(10) of this permit.

D. AGENCY INVOLVEMENT

Personnel from the Ohio EPA have unrestricted right of entry to the wells, as detailed in Part I (E)(8) of this permit.

If you should have any questions, please do not hesitate to contact Lindsay Taliaferro III, UIC Manager or Valerie Orr of my staff at (614) 644-2752.

Sincerely,

Michael G. Baker, Chief
Division of Drinking and Ground Waters

MGB:vo
daytonthermalissuance.doc

Enclosures

cc: Lindsay Taliaferro III, Manager, UIC
Gary Stanczuk, Chrysler LLC

The above named applicant is hereby ISSUED a 5X26 Area Permit to Operate for the above described underground injection wells pursuant to Sections 6111.043 and 6111.044 of the Ohio Revised Code and to Chapter 3745-34 of the Ohio Administrative Code. Issuance of this 5X26 Area Permit to Operate does not constitute expressed or implied approval or agreement that, if constructed and/or modified in accordance with the specifications and/or information accompanying the permit application, the above described activity will be in compliance with applicable State and Federal laws and rules and regulations. This 5X26 Area Permit to Operate is issued subject to the attached conditions which are hereby incorporated and made a part hereof.

Expiration Date: This permit shall expire at midnight on the expiration date indicated above, unless terminated or modified under Chapter 3745-34 of the Ohio Administrative Code.

Chris Korleski, Director
OHIO ENVIRONMENTAL PROTECTION AGENCY

D. CONFIDENTIALITY

In accordance with OAC Rule 3745-34-03 any information submitted to the Ohio EPA pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission by stamping words "confidential business information" on each page containing such information. If no claim is made at the time of submission, the Ohio EPA may make the information available to the public without further notice. If a claim is asserted, documentation for the claim must be tendered and the validity of the claim will be assessed in accordance with the procedures in OAC Rule 3745-34-03. If the documentation for the claim of confidentiality is not received, the Ohio EPA may deny the claim without further inquiry. Claims of confidentiality for the following information will be denied:

1. The name and address of the permittee;

2. Information which deals with the existence, absence or level of contaminants in receiving water.

E. DUTIES AND REQUIREMENTS (OAC RULE 3745-34-26)

1. Duty to Comply. The permittee shall comply with all applicable UIC regulations and conditions of this permit, issued in accordance with OAC Rule 3745-34-19. Any permit noncompliance constitutes a violation of ORC Chapter 6109. or 6111. and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application. Such noncompliance also may be grounds for enforcement action under other applicable state and federal law.

2. Penalties for Violations of Permit Conditions. Any person who violates a permit requirement is subject to injunctive relief, civil penalties, fines and/or other enforcement action under ORC Chapters 6111., 6109., or 3734. Any person who knowingly or recklessly violates permit conditions may be subject to criminal prosecution.

3 Continuation of Expiring Permits.
Duty to Reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall submit a complete application for a new permit at least 180 days before expiration of this permit.

4. Need to Halt or Reduce Activity Not a Defense. It shall not be a defense, for a permittee in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of these permits.

5. Duty to Mitigate. The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit.

c. The permittee shall retain records concerning the nature and composition of all injected fluids for three (3) years after the project has been completed.

d. The permittee shall continue to retain such records after the retention period specified by paragraphs (a) to (c) above, unless he delivers the records to the Director or obtains written approval from the Director to discard the records.

e. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

f. Records of monitoring information shall include the following as applicable pursuant to OAC Rule 3745-34-26(J)(3):

i. The date, exact place, and time of sampling or measurements;

ii. The name(s) of the individual(s) who performed the sampling or measurements;

iii. A precise description of sampling methodology;

iv. The date(s) analyses or measurements were performed;

v. The name(s) of the individual(s) who performed the analyses or measurements and the laboratory that performed the analyses or measurements;

vi. The analytical techniques or methods used; and

vii. All results of such analyses.

10. Signatory Requirements. All reports or other information, required to be submitted by this permit or requested by the Director, shall be signed and certified in accordance with OAC Rule 3745-34-17.

11. Reporting Requirements.

a. *Planned Changes. The permittee shall give written notice to the Director, as soon as possible, of any planned physical alterations or additions to the permitted facility. Within ten (10) days of the verbal notification, or of the* commencement of construction, the permittee shall give written notice to the Director with justification of any planned physical alterations to the permitted well(s).

b. Anticipated Noncompliance. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

F. PLUGGING AND ABANDONMENT

1. Plan for Plugging and Abandonment. Before any well installed pursuant to this permit is taken out of service, the permittee shall submit to the Ohio Environmental Protection Agency a plan for the plugging and abandonment of such well. The required plan shall specify procedures and contain such other provisions as are necessary to ensure that no movement of fluids into an underground source of drinking water is allowed. After review and acceptance of this plan by the Ohio Environmental Protection Agency, that plan shall automatically become a condition of this permit.

2 Abandonment Requirements. Injection wells declared as temporarily abandoned shall be maintained in strict compliance with Rule 3745-9-09 of the OAC to ensure that the well will not endanger underground sources of drinking water during the period of temporary abandonment. Injection wells declared as permanently abandoned shall be plugged in accordance with Rule 3745-9-10(C) of the OAC.

3. Plugging Report. Within 30 days after plugging the well, the permittee shall submit a plugging report to the Director. The report shall be certified as accurate by the person who performed the plugging operation and shall contain a statement defining the plugging procedure.

G. CORRECTIVE ACTION

1. Should routine monitoring or any other information indicate that primary drinking water standards as defined in Chapter 3745-81 of the OAC are, or may be, exceeded in any underground source of drinking water beyond the property boundary, or any monitored or other parameters are being significantly degraded in underground sources of drinking water not permitted for underground injection and as a consequence of the injection well operation, the permittee shall develop a corrective action plan. Such plan must include a determination of the nature, rate, and extent of the degradation. The plan may also be required to include appropriate remedial actions such as: additional chemical treatment, discontinuance of injection operations and/or others yet to be determined.

2. The plan for corrective action shall be submitted to the Director within 30 days of the date that indications of a violation of Chapter 3745-81 are noted, and are subject to approval by the Ohio EPA prior to implementation.

C. REPORTING

The permittee shall submit monitoring reports to the Ohio EPA, Division of Drinking and Ground Waters, Underground Injection Control Unit by the 15th day of the month following each month that monitoring results are required in accordance with schedules described in Part II(B) of this permit at the following address:

Ohio EPA
Division of Drinking and Ground Waters
Underground Injection Control Unit
Lazarus Government Center
50 West Town Street, Suite 700
P.O. Box 1049
Columbus, Ohio 43216-1049

Reports shall contain information regarding types of tests and methods used to generate monitoring data, as specified in Part I (E)(10) of this permit.

D. AGENCY INVOLVEMENT

Personnel from the Ohio EPA have unrestricted right of entry to the wells, as detailed in Part I (E)(8) of this permit.

#12

STATUS REPORT AND RECOMMENDATIONS
ENVIRONMENTAL SITE ASSESSMENT

DAYTON THERMAL PRODUCTS DIVISION
DAYTON, OHIO

ACUSTAR, INC.
CHRYLSER MOTORS CORPORATION

August 16, 1991

Prepared for:

ACUSTAR, INC.
1600 Webster Street
Dayton, Ohio 45404

Project 423023

JOHN MATHES & ASSOCIATES, INC.
East Park One Building
701 Rodi Road, Suite 101
Pittsburgh, Pennsylvania 15235-4559
(412) 824-0200

BACKGROUND

- Old Maxwell Complex demolition to make space for Building 59

- Discovery of VOC and TPH contamination in areas of:

  - Concrete Slabs
  - Sewer Lines
  - Process Pipelines
  - Process Sumps
  - Nonhazardous Waste Storage Pad
  - Oil/water Separator
  - TCA Tank
  - Flux Room
  - New Product Barrel Storage
  - Battery Storage

- Soil in Footprint of Building 59

- Soil in adjacent areas to be paved

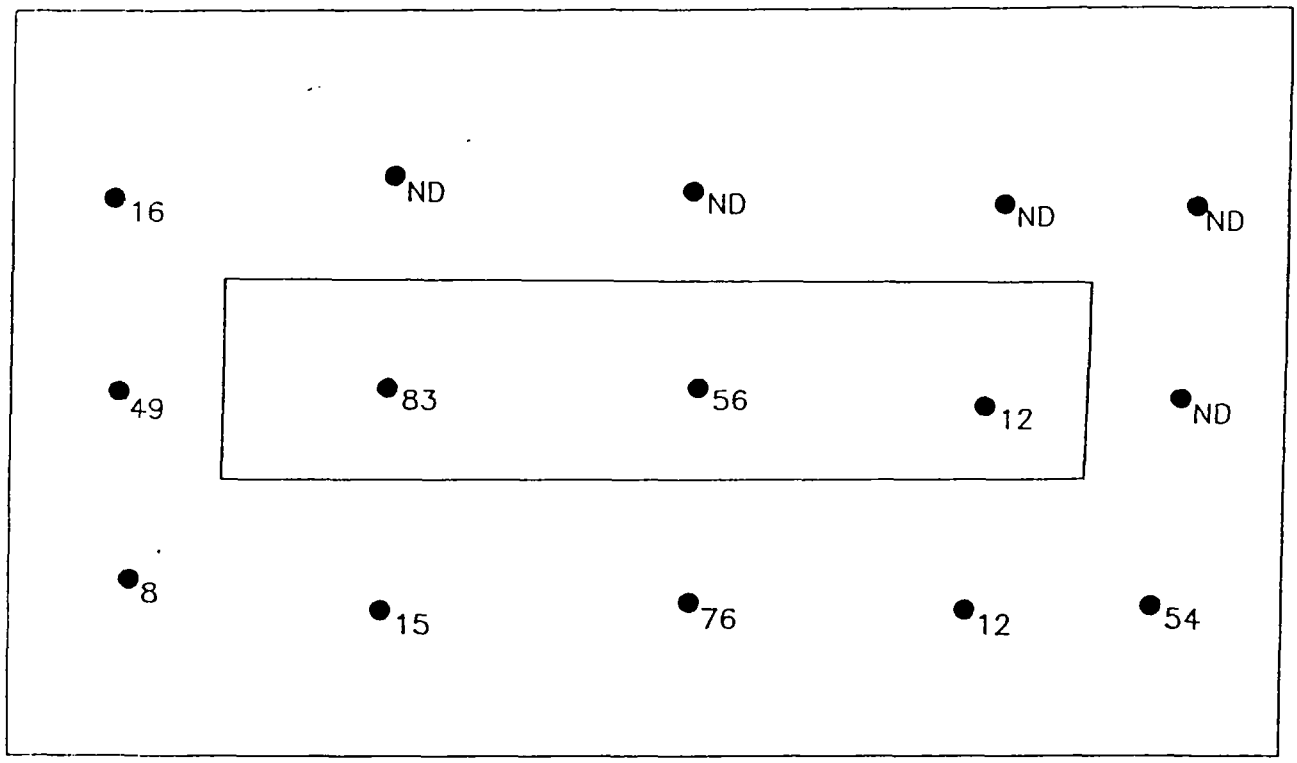
REMEDIAL ACTIVITIES TO DATE

- Special Waste
  - Shipments to Pinnacle Road Landfill
    166 loads (~$25/cubic yard)

- Hazardous Waste
  - Soil
    F001 from 40B
    5 loads ($1,200-$1,500 per cubic yard)
  - Concrete
    Chromium leach
    Lead leach
    11 loads to date ($300-$500 per cubic yard)
    7 additional loads being evaluated

- On-Site Treatment of TPH and VOC Contaminated Soil
  - Building 59 Footprint
  - Adjacent areas to be paved

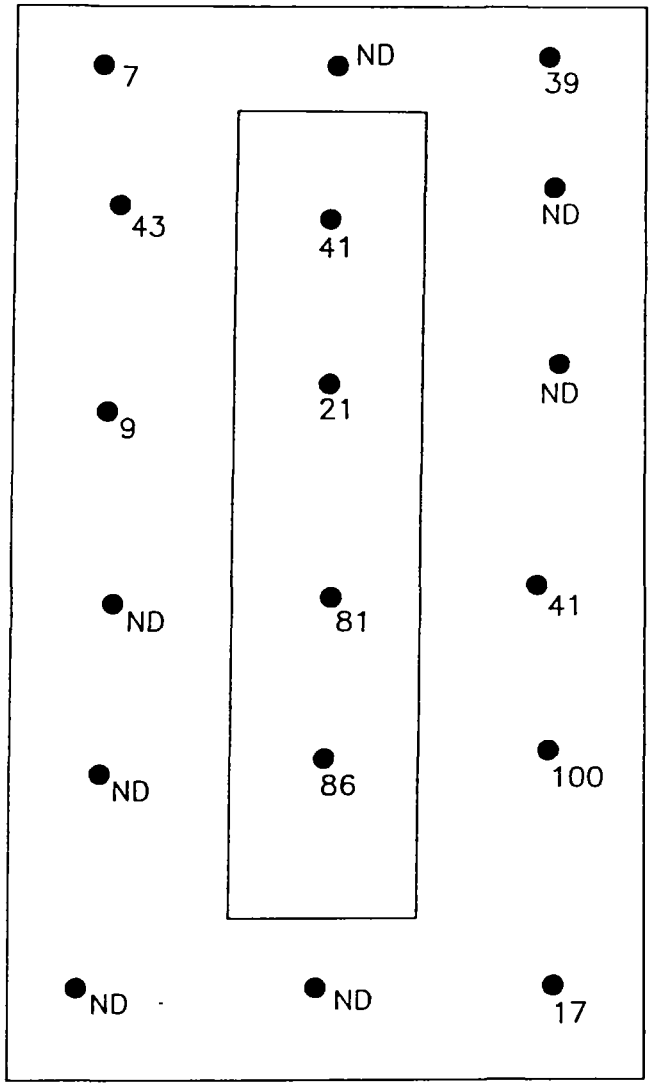
CLEAN SOIL STOCKPILE



EXPLANATION

8 APPROXIMATE SAMPLE LOCATION WITH TOTAL VOLATILE ORGANIC COMPOUNDS (METHOD 8240) IN ug/kg

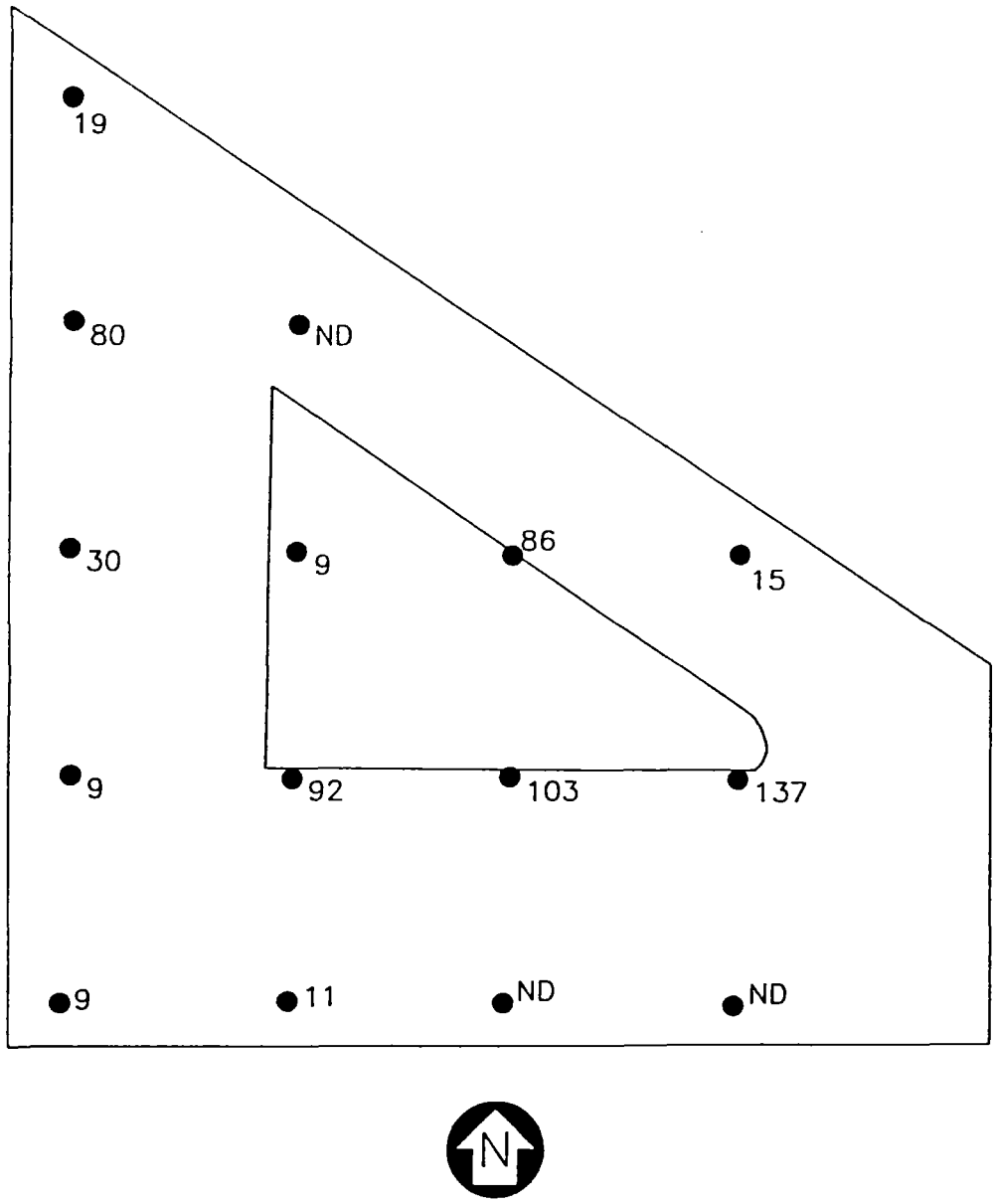
VOC VACUUM EXTRACTION BED



EXPLANATION

ND APPROXIMATE SAMPLE LOCATION WITH TOTAL VOLATILE ORGANIC COMPOUNDS (METHOD 8240) IN ug/kg

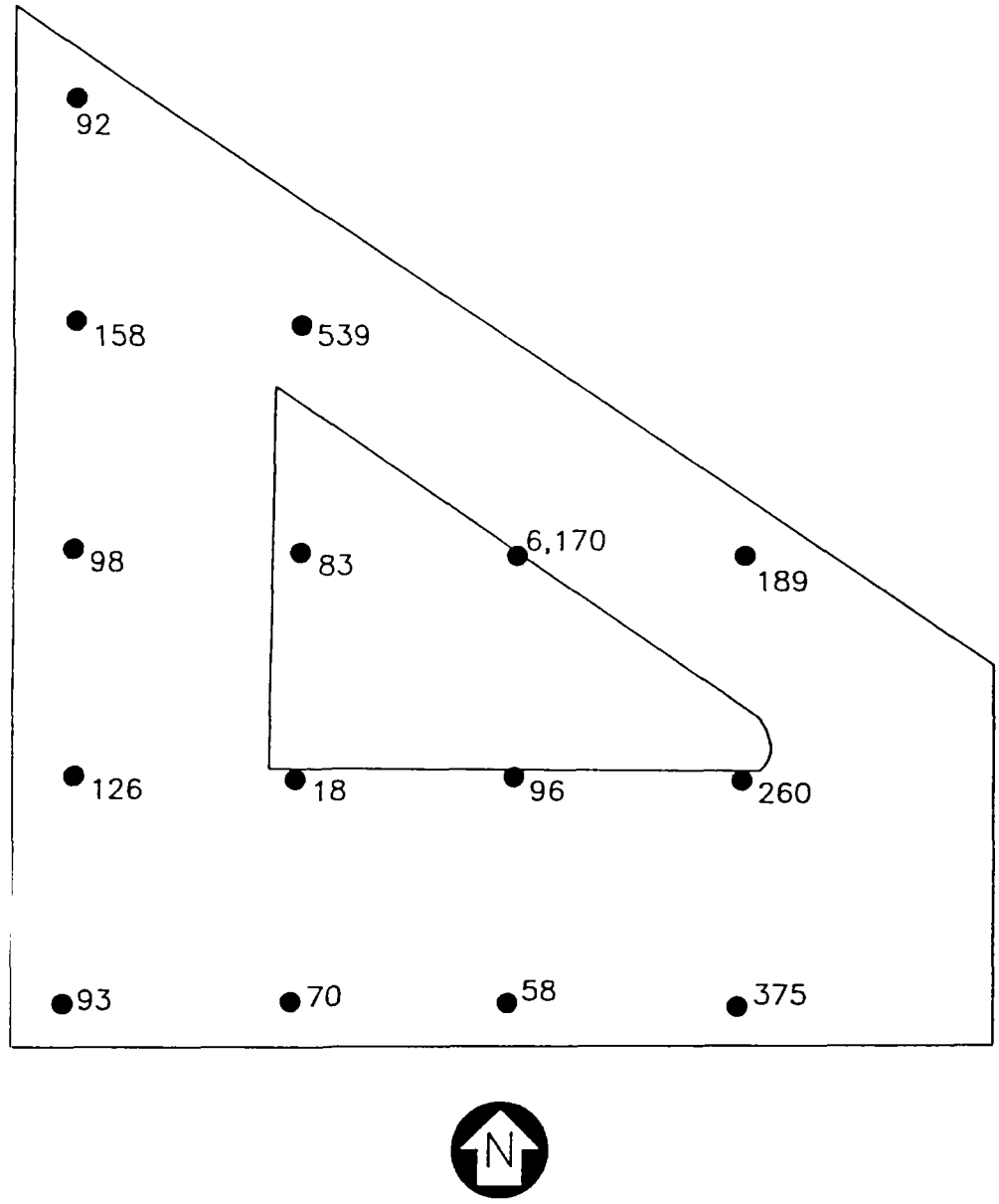
TPH VACUUM EXTRACTION BED



EXPLANATION

● 9 APPROXIMATE SAMPLE LOCATION WITH TOTAL VOLATILE ORGANIC COMPOUNDS (METHOD 8240) IN ug/kg

TPH VACUUM EXTRACTION BED



EXPLANATION

●93 APPROXIMATE SAMPLE LOCATION WITH TOTAL PETROLEUM HYDROCARBONS (METHOD 418.1) IN mg/kg

EXPANDED SITE INVESTIGATION

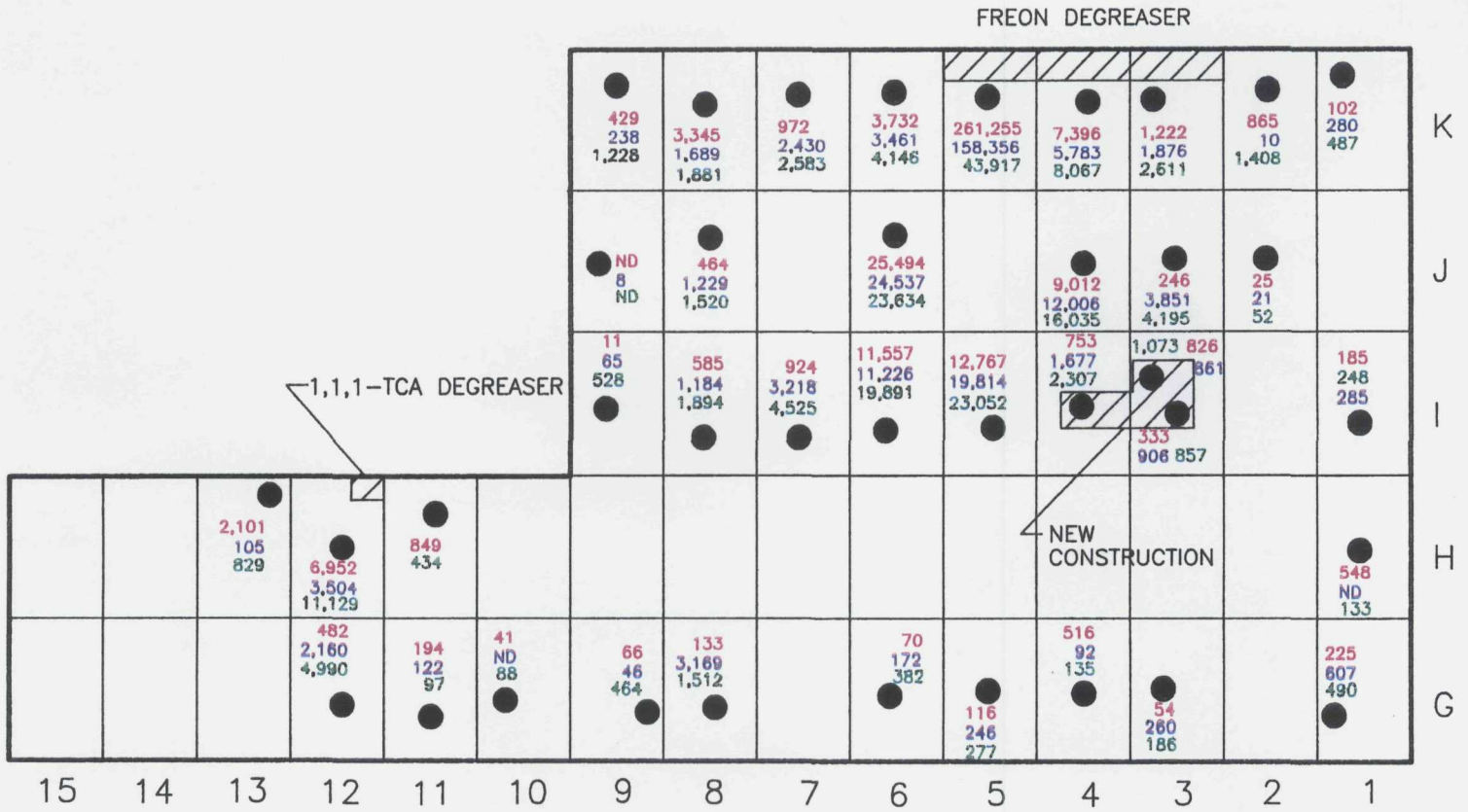
- RECON — Buildings 40A and 40B
  - Soil Gas

- RECON - Site-Wide Reconnaissance
  - Soil Gas
  - Groundwater

- Literature Review
  - Conceptual Subsurface Model

- Surrounding Properties

TOTAL VOCs IN SOIL GAS USING RECON℠ - BUILDING 40A & 40B DAYTON THERMAL PRODUCTS PLANT



EXPLANATION

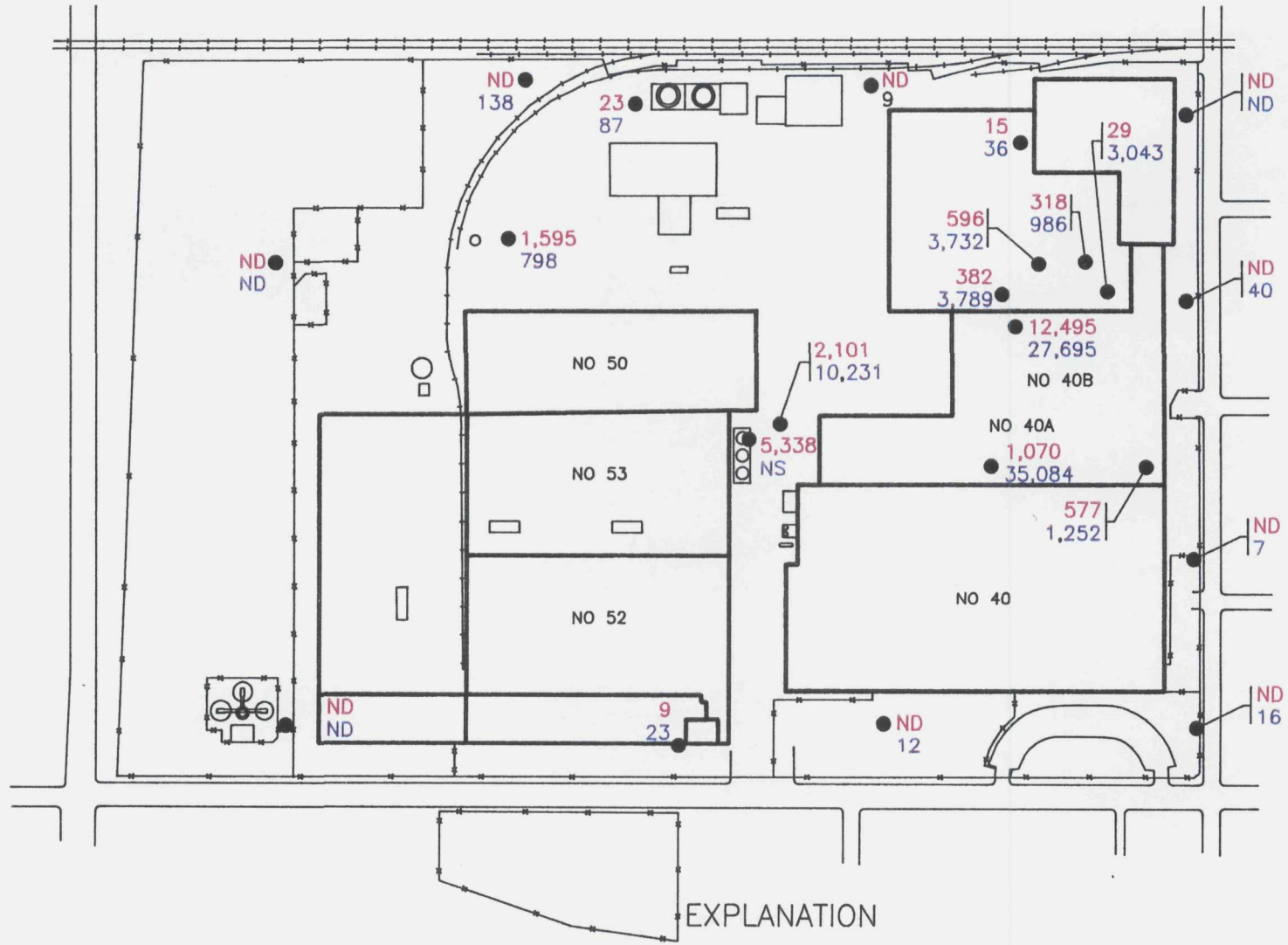
●	APPROXIMATE RECON℠ SAMPLE LOCATION
116	TOTAL VOCs DETECTED IN SOIL GAS USING RECON℠ AT 0 – 1' (ug/L)
172	TOTAL VOCs DETECTED IN SOIL GAS USING RECON℠ AT 3 – 4' (ug/L)
382	TOTAL VOCs DETECTED IN SOIL GAS USING RECON℠ AT 6 – 7' (ug/L)
ND	NOT DETECTED

0 80 160

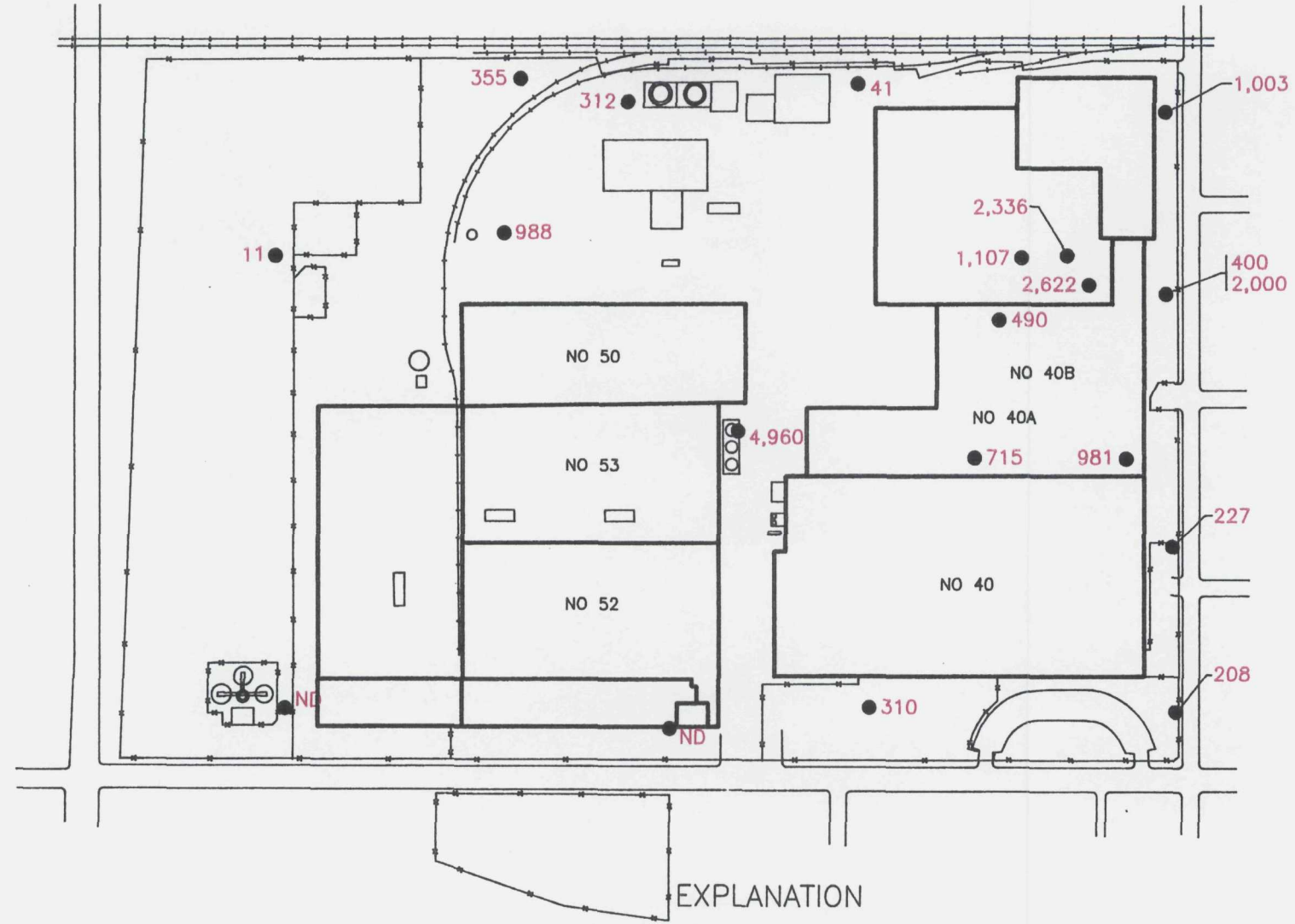
SCALE IN FEET

N

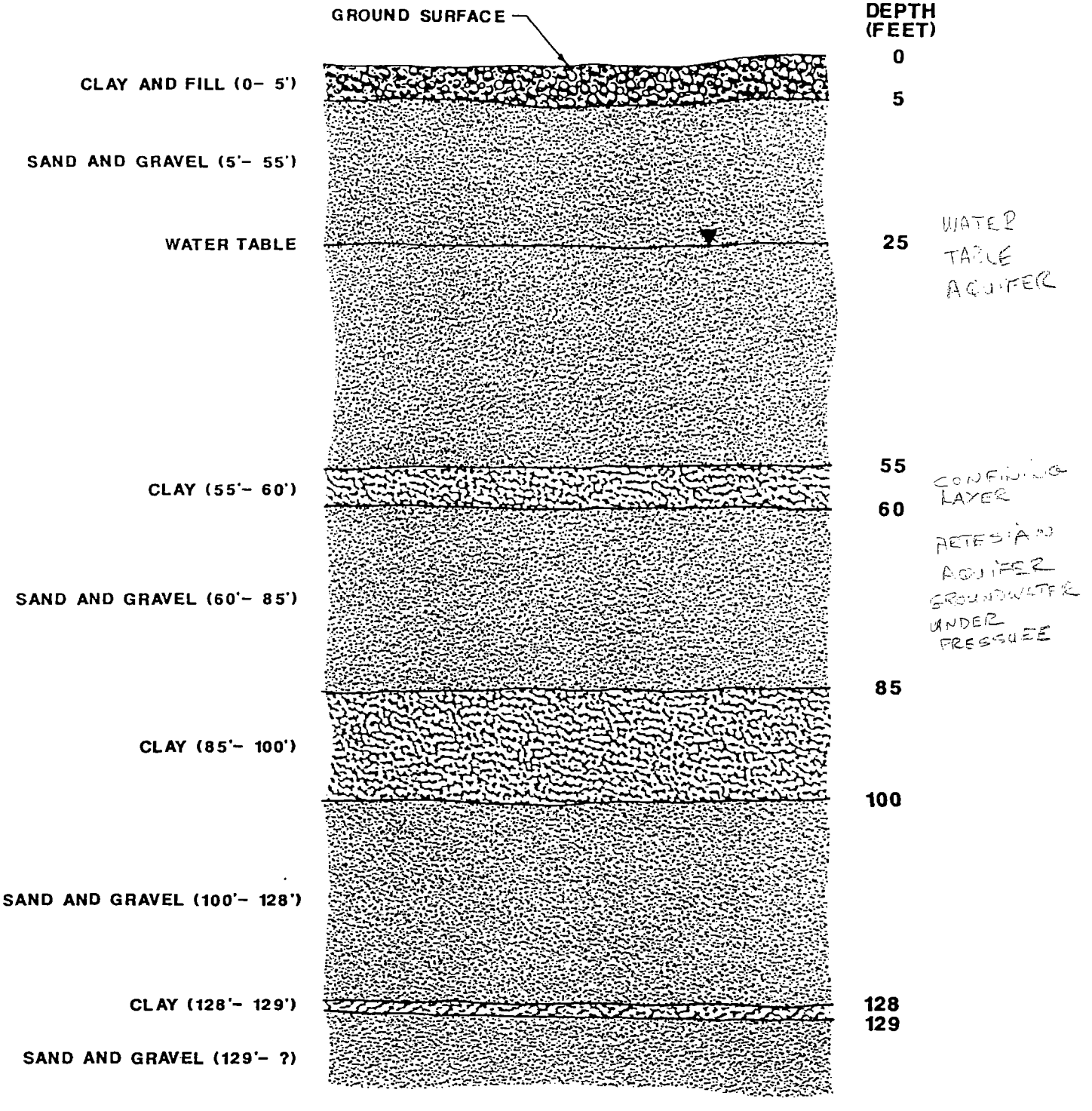
TOTAL VOCs IN SOIL GAS
DAYTON THERMAL PRODUCTS PLANT



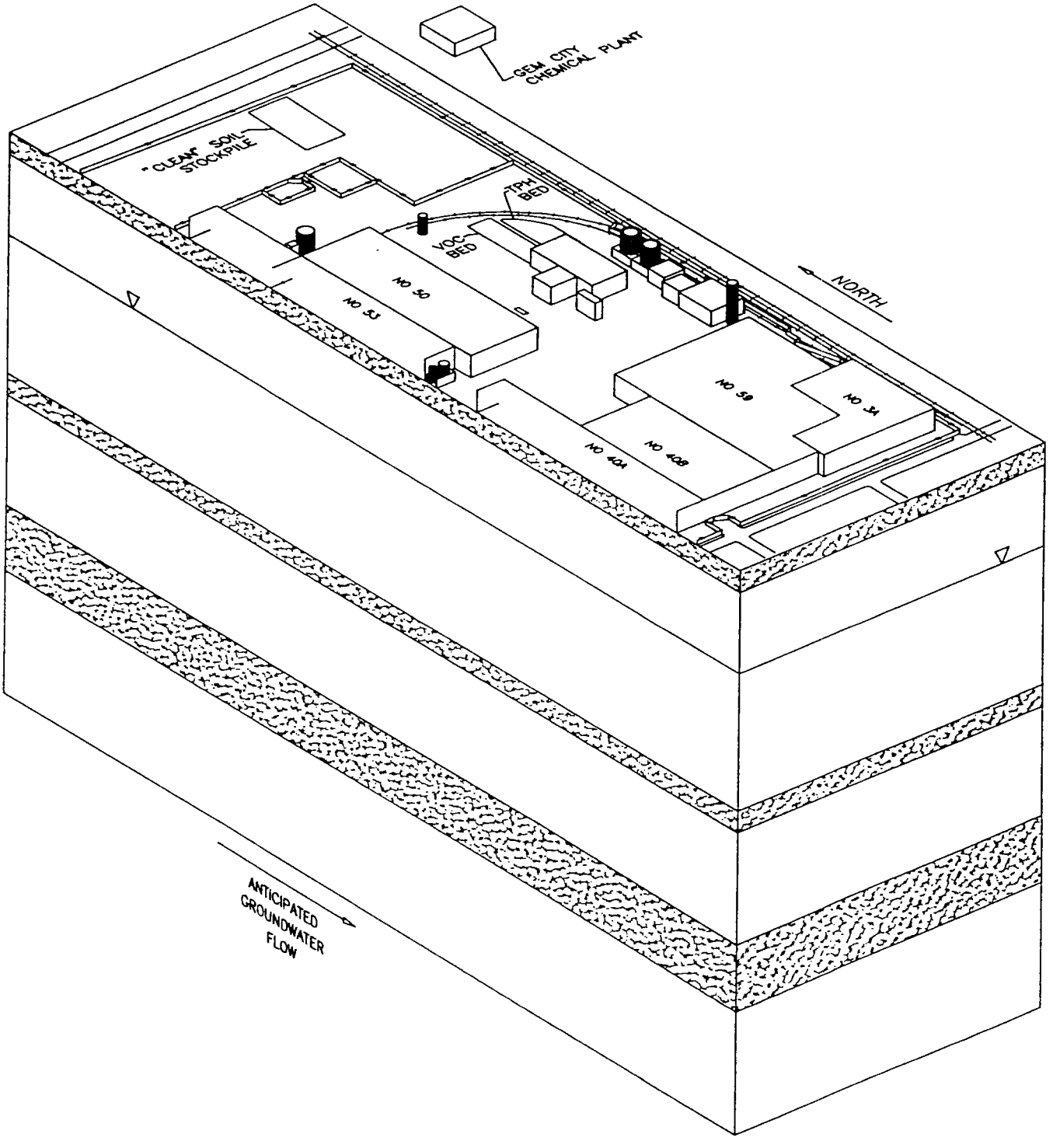
TOTAL VOCs IN GROUNDWATER
DAYTON THERMAL PRODUCTS PLANT



CONCEPTUAL SUBSURFACE CONDITIONS
DAYTON THERMAL PRODUCTS PLANT



CONCEPTUAL SUBSURFACE CONDITIONS
DAYTON SITE



ADDITIONAL WORK RECOMMENDED

- Prevent Identified Sources From Contaminating Aquifer — Source Control
  - 1,1,1-TCA tanks south of Building 59
  - Building 40B

- Evaluate Subsurface Conditions
  - Vertical profile and lateral extent of sediments. Delineate aquifer and semi-confining layer boundaries.
  - Aquifer, vadose zone and semi-confining layer properties:
    1. Air flow for soil venting
    2. Groundwater flow in water table and first semi-confined aquifer for groundwater remediation
    3. Semi-confining layer properties and orientation for non-aqueous phase contaminant flow

- Evaluate Risks and Options

- Select Cost-Effective Alternative(s)

SOURCE CONTROL
1,1,1-TCA TANKS

OPTIONS

1. Tank System as a continuing source

   - Remove from service
   - Integrity Test
     - visual inspection
     - corrosion
     - improve material management

2. Subsurface Contamination

   - Soil

     - Excavation/removal (RCRA hazardous waste)

       Assume 100 x 100 x 25 ~ 9,000 yards
       $1,200/cubic yard for incineration

       ~$11 Million

     - Venting (minimize RCRA hazardous waste)

       ~$50,000 as part of program outlined below

   - Groundwater

     - To be selected as part of site-wide evaluation

SOURCE CONTROL
BUILDING 40B

OPTIONS

1. Building as a Continuing Source

   - Remove from service
     - improve material management practices
     - discontinue use of solvents
     - halt production

   - Isolate from environment
     - venting system discussed below

2. Subsurface Contamination

   - Soil
     - 127,000 cubic yards may be affected
     - All subsurface work will generate RCRA hazardous waste (requires handling at $1,200-1,500/cubic yard)
     - Excavation/Removal
       All RCRA hazardous waste - $152 million
     - Venting
       Minimize generation of RCRA hazardous waste - $0.7-$1.5 million

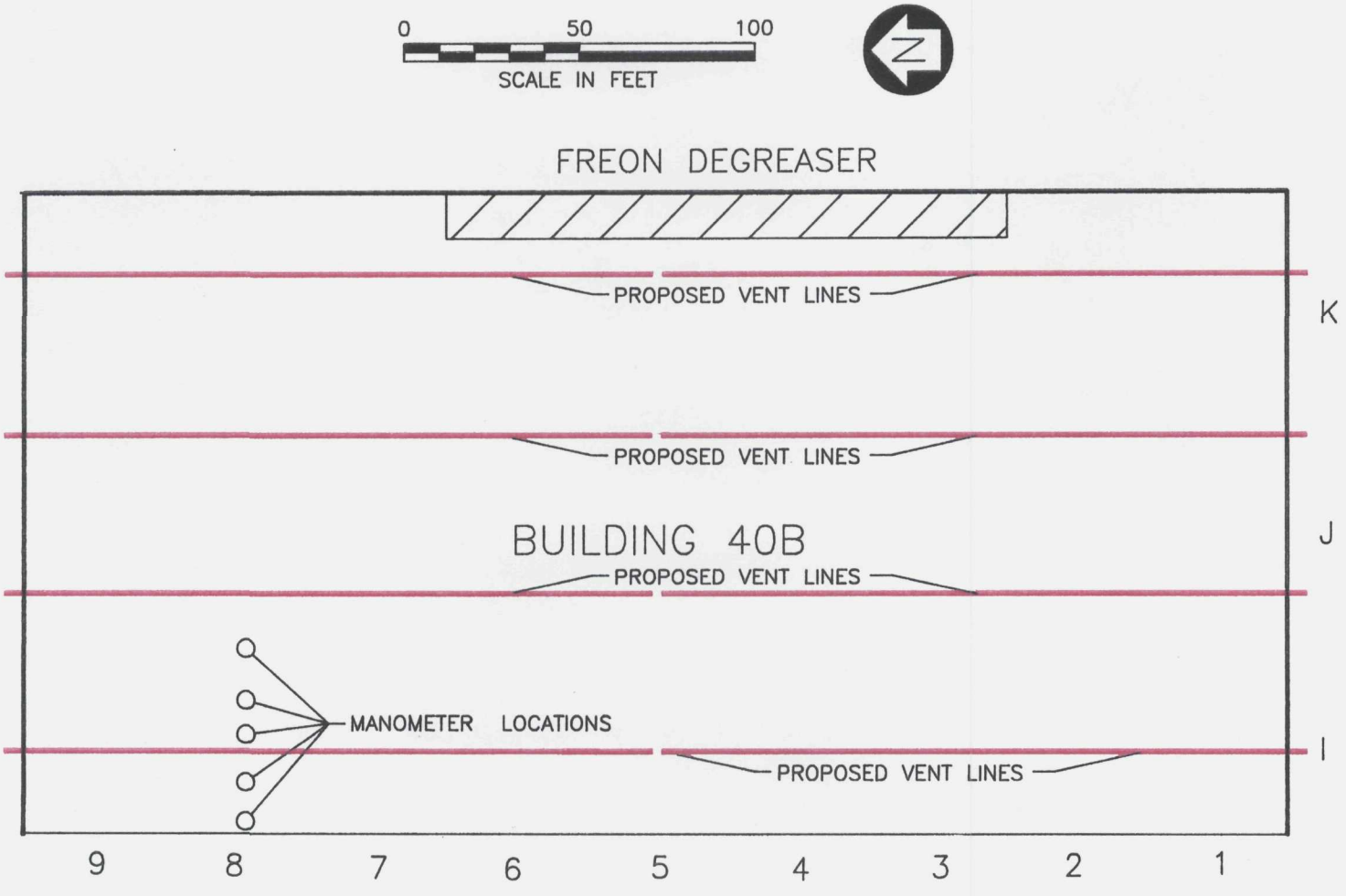
       a. Vertical - not most cost-effective option due to site logistics

       b. Horizontal
          - from surface - infeasible logistically
          - from outside of building

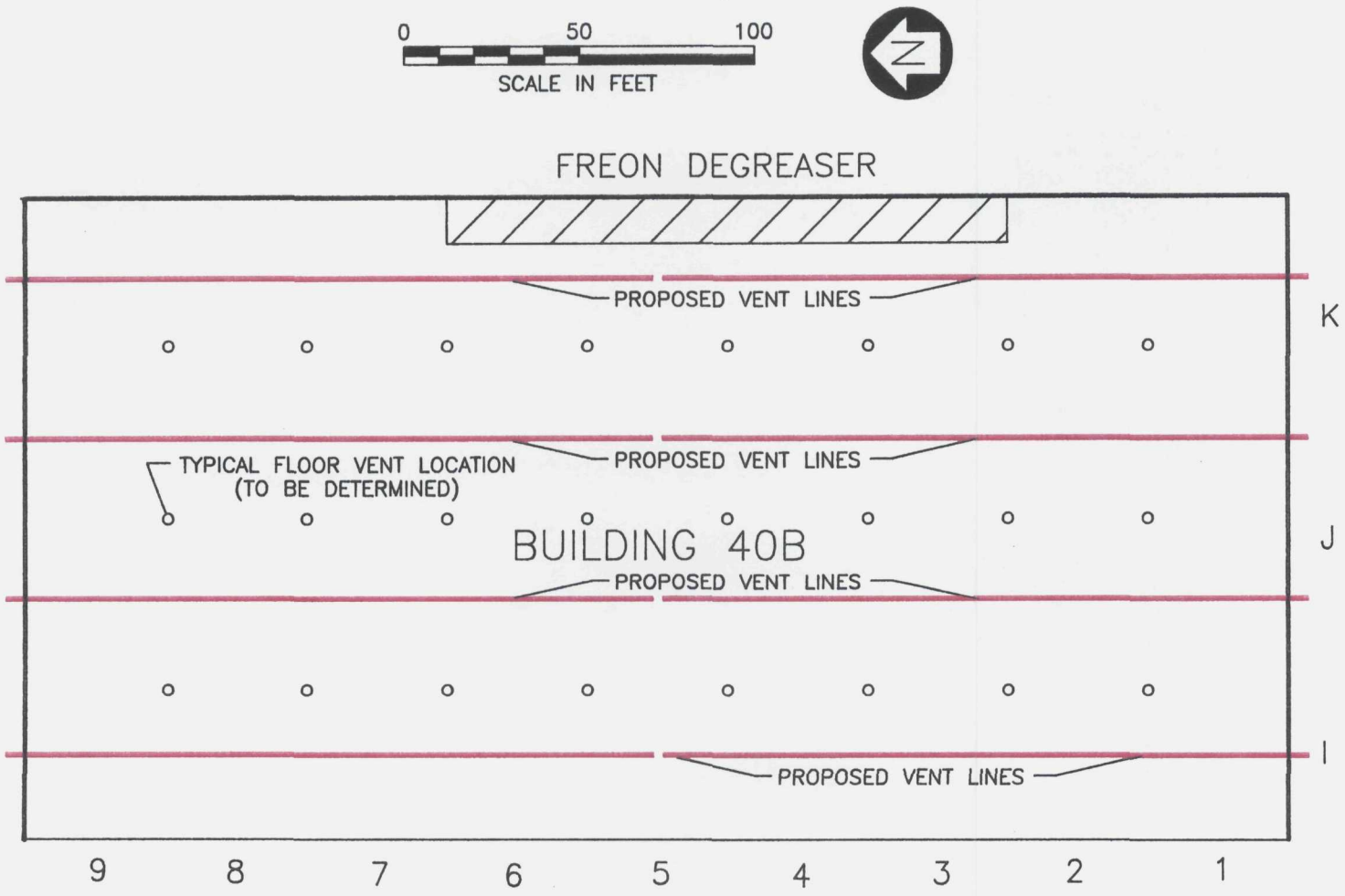
       Program outlined below

   - Groundwater
     - To be selected as part of site-wide evaluation

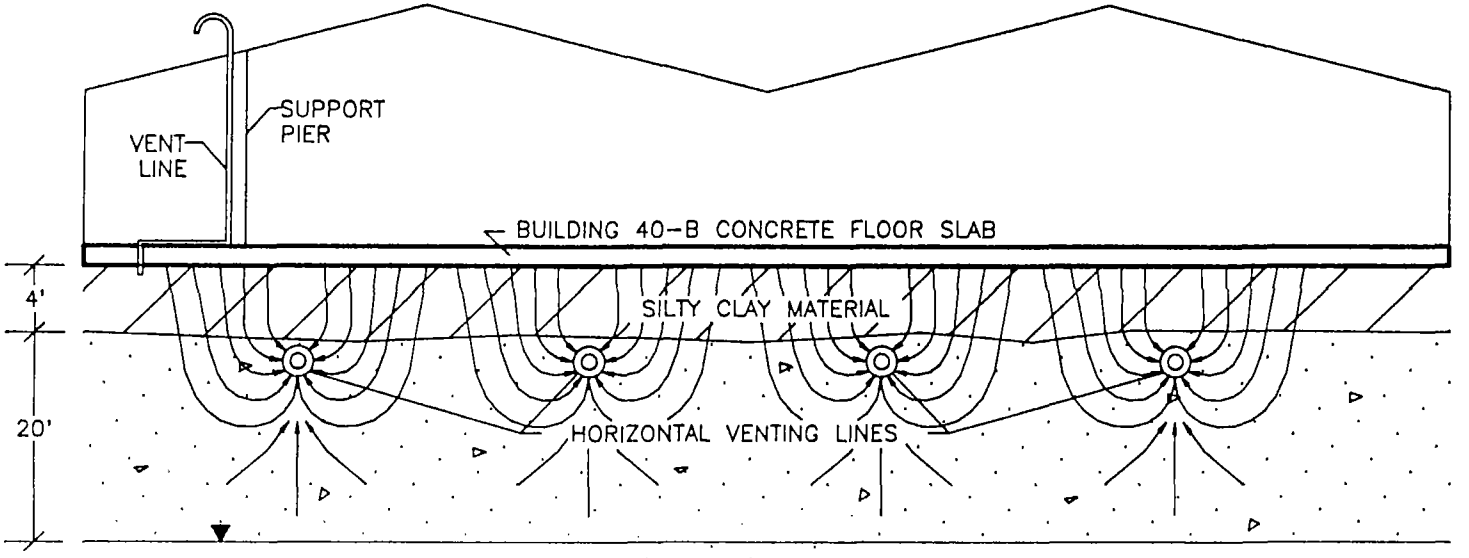
PROPOSED LOCATION FOR HORIZONTAL VENTING LINES HORIZONTAL SOIL VENTING SYSTEM



TYPICAL FLOOR VENTING LOCATION
HORIZONTAL SOIL VENTING SYSTEM



CROSS SECTION DIAGRAM OF PROPOSED VENTING SYSTEM



NOT TO SCALE

SUBSURFACE ASSESSMENT AND CLEANUP EVALUATION ANTICIPATED SCOPE OF WORK

- Evaluate subsurface soil condition in area of 1,1,1-TCA tanks and storage area east of Building 50
  - VOCs
  - Grain size distribution
  - Response testing (venting test)
    - to evaluate, design, and cost soil venting as a remedial alternative

- Advance deep (100 feet) boreholes to evaluate continuity of stratigraphy
  - Six boreholes through base of "confined" saturated zone
  - Evaluate data requirements
  - Install wells

- Advance shallow (55 feet) boreholes to evaluate water table and continuity of confining zone
  - Six boreholes to base of first "confining" layer
  - Evaluate data requirements
  - Install wells

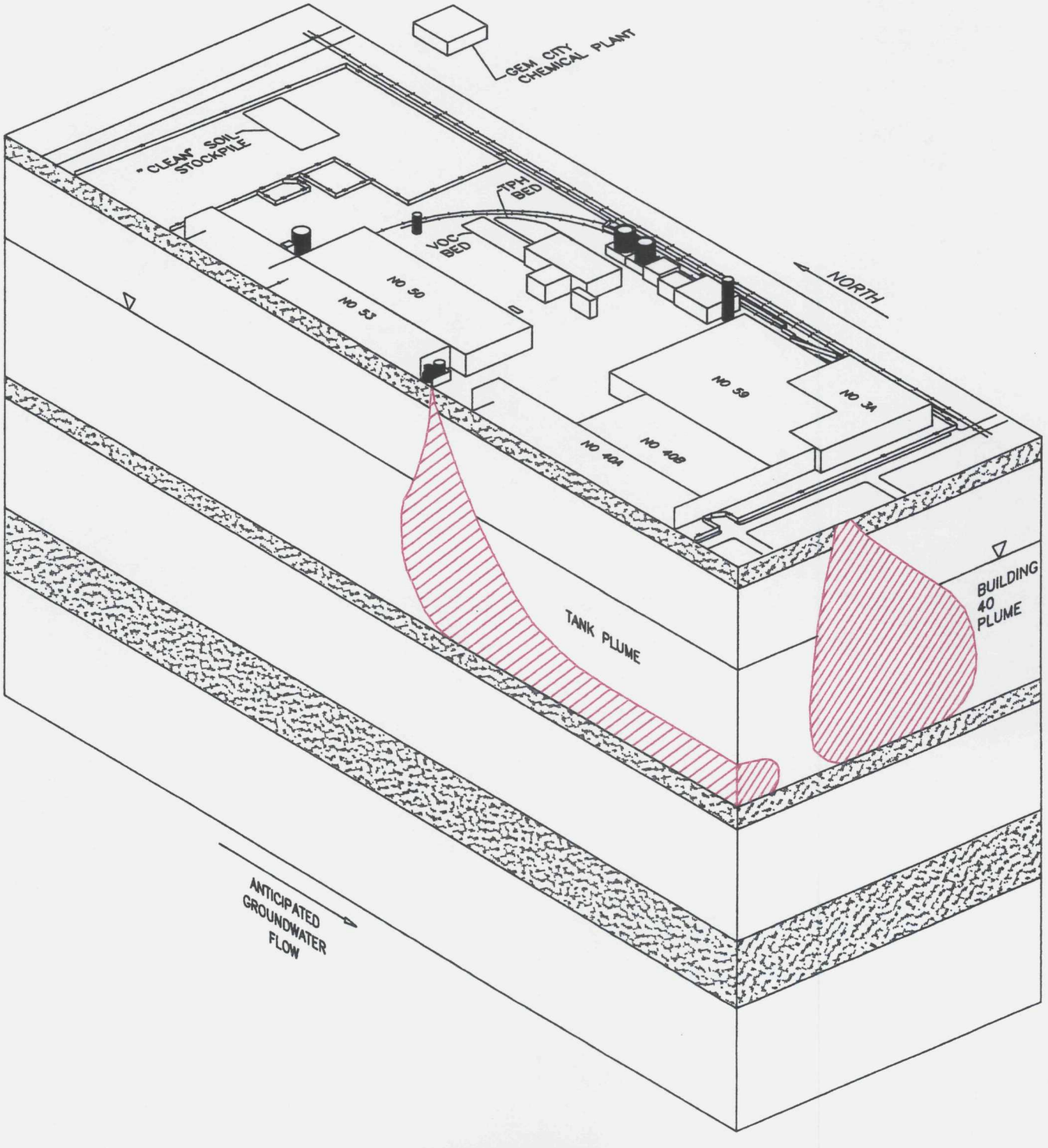
- Evaluate groundwater and properties of water table and first "confined" zone
  - Flow direction
  - Water quality (VOCs plus parameters required for remediation)
  - Response testing (pumping test)
    - to select and design appropriate remedial method

- Evaluate cleanup standards
  - ARARs
  - RCRA Corrective Action Levels
  - Health-risk based levels

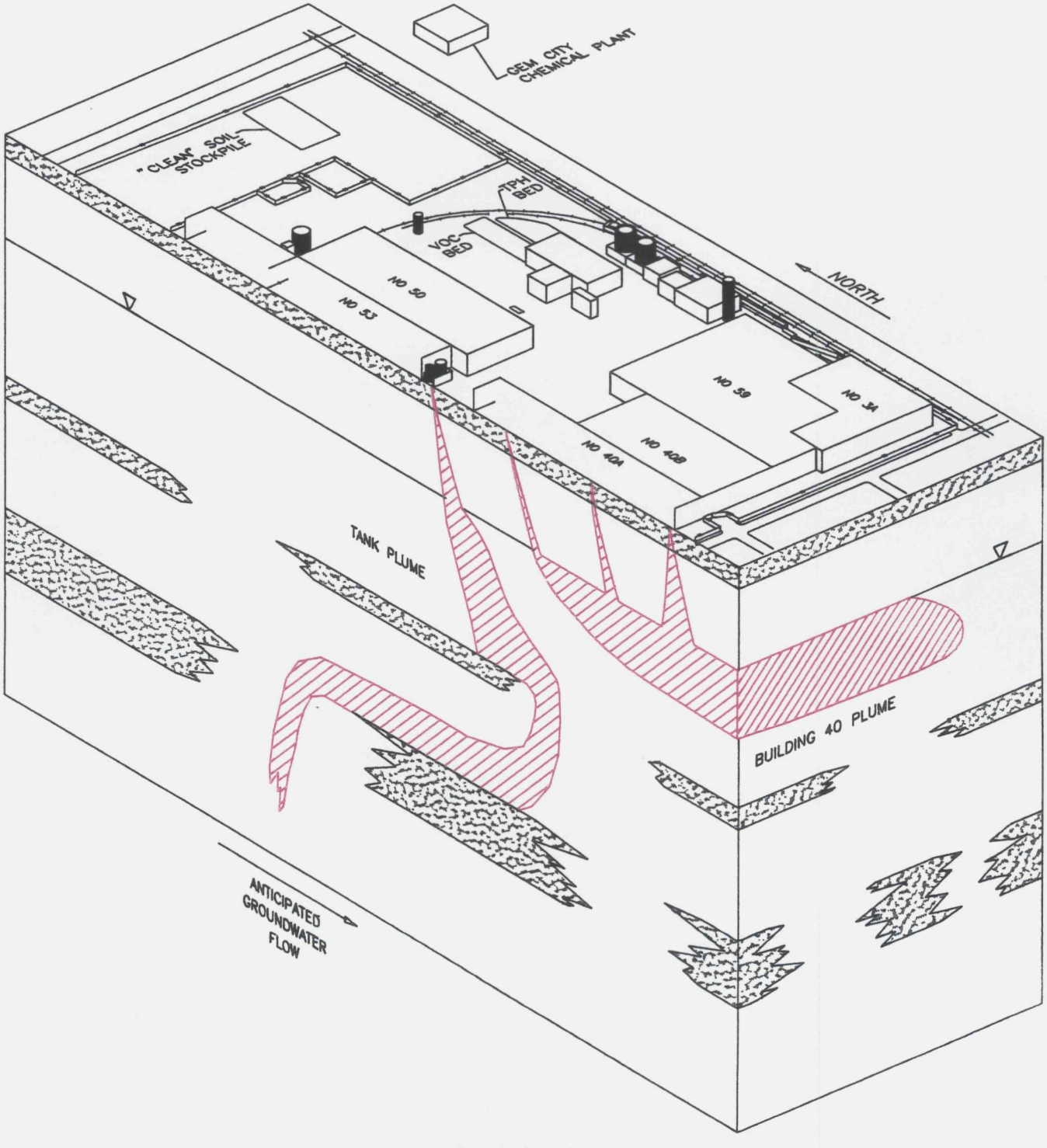
- Engineering evaluation
  - Soil
  - Groundwater

- Recommendations

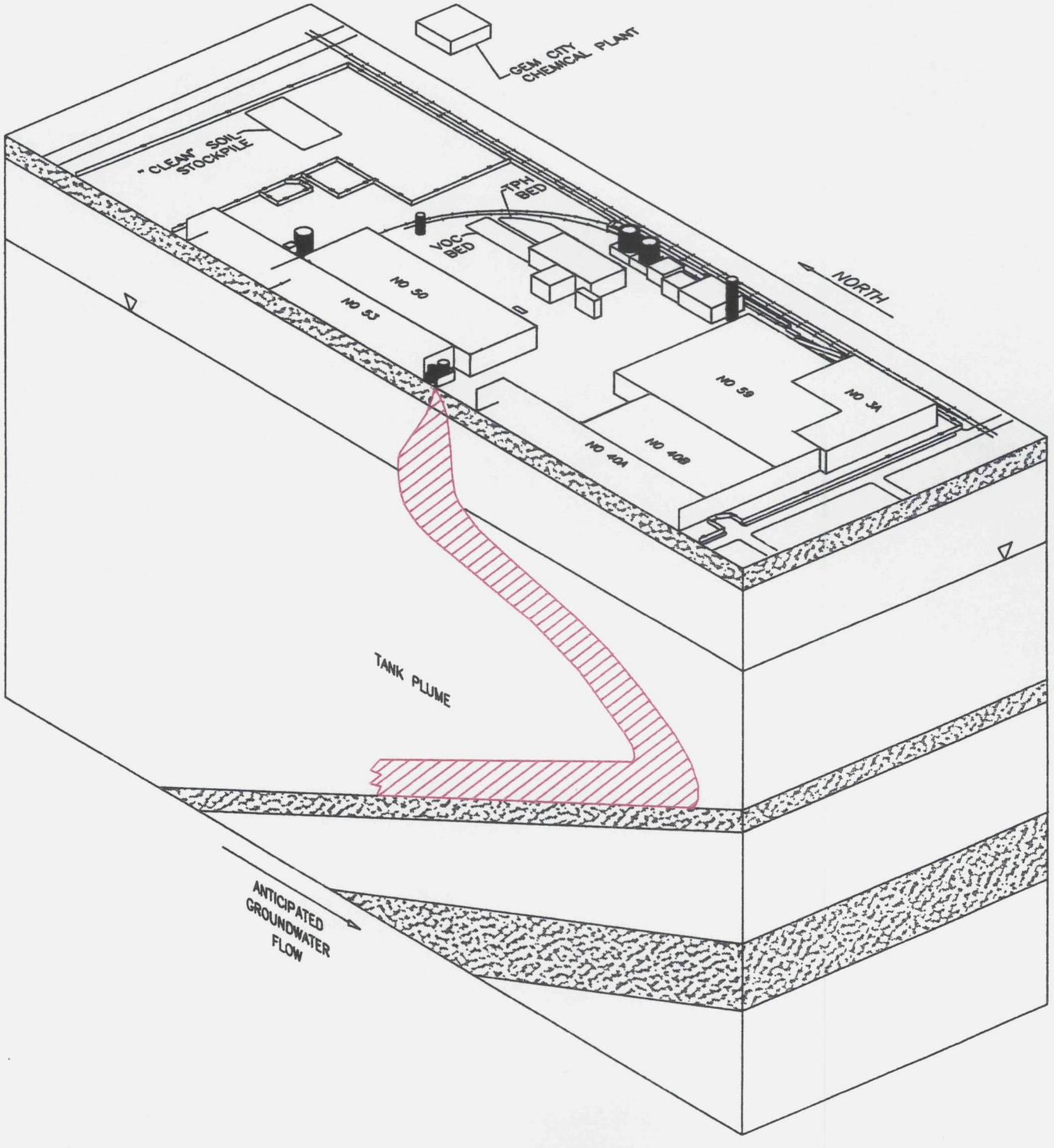
CONCEPTUAL SUBSURFACE CONDITIONS
DAYTON SITE
"HORIZONTAL" CONFINING LAYER



CONCEPTUAL SUBSURFACE CONDITIONS
DAYTON SITE
"LEAKY" CONFINING LAYER



CONCEPTUAL SUBSURFACE CONDITIONS
DAYTON SITE
"TILTING" CONFINED LAYER



DRIVING FORCES/CONCERNS

- Release of hazardous substance/waste to the environment

- Affects groundwater above federally promulgated maximum contaminant levels (MCLs) (drinking water)

- Previously pumped contaminated Power House well for 90 days @ 1 million gallons per day - no change in contaminant level (large volume affected)

- Potential for off-site migration
  - increases difficulty ($) of recovery

- Minimize potential Superfund "PRP" responsibility/ participation of Dayton aquifer remediation

- Evaluate "Island of Purity" concept
  - remediate media affected by plant

#13

SITE ASSESSMENT SUMMARY

Prepared for
Acustar - Dayton Thermal Products Division
1600 Webster Street
Dayton OH 45404

Prepared by
Clean Tech
2700 Capitol Trail
Newark DE 19711
(302) 999-0924

February, 1994

CLEAN TECH

Clean Tech Inc
Environmental Consultants
2700 Capitol Trail
Newark DE 19711
302•999•0924
FAX 302•999•0925

February 2, 1994

Mr. Luther L. Blair
Manager - Environmental Planning
Acustar, Inc.
1850 Research Drive
CIMS 404-01-01
Troy MI 48083

Re: Site Assessment Summary Final Draft

Dear Lou:

Enclosed is the final draft of the site assessment summary report which was prepared for Dayton Thermal Products Division. The report includes a review of all previous site audits, identification of on-site and off-site sources of contamination, a review of regional and local geology, and overview of remediation objectives as required by Ohio EPA, and a summary including recommendations. We have incorporated all revisions by you and Doug.

After you have reviewed the report, please contact me so that we may discuss the report.

Sincerely,

Deborah A. Buniski, P.E.
President
CLEAN TECH

Enclosure

cc: D. Orf

Table of Contents

6 Process Wastewater and Waste Oil Sumps (Burlington/Mathes Soil Gas Investigation Report)
7 Process Units and Areas (Burlington/Mathes Soil Gas Investigation Report)
8 Total VOCs in Groundwater
9 Regional Geomorphology Map
10 Conceptual Stratigraphy
11 Potentiometric Surface Map for Gem City Chemicals, Inc.
12 Water Well Locations for Gem City Chemicals, Inc.
13 Groundwater Protection Districts

Attachments

1 Driller Logs

SECTION 1.0 - BACKGROUND

The report was prepared by Clean Tech (CT) for the Dayton Thermal Products Plant (DTPP) located at 1600 Webster street in Dayton, Ohio. This plant is a part of Acustar/Components (A/C), a division of Chrysler Corporation.

1.1 Purpose

DTPP requested that CT review and compile available information on the plant and surrounding sites to determine if the surrounding sites or activities at the plant may have impacted the soil or groundwater. The report's purpose was to gather additional information to complete an environmental assessment of the plant site. This report will be used as the basis for the design and implementation of a hydrogeolocial study of the facility.

1.2 Report Preparation Methodology

The following provides a summary of the methodology and procedures used to research and compile the information contained in this report.

1. Meetings were held with key personnel to obtain background information on past and current plant operations. Personnel interviewed included Mr. Douglas J. Orf, Environmental Coordinator for the Dayton Plant, and Mr. Luther L. Blair, Manager of Environmental Planning for A/C.
2. Records relating to hazardous wastes generated by the Dayton Plant during the past five years were reviewed. Other reports and records reviewed included reported spills and MSDSs compiled for the facility.
3. The State of Ohio Environmental Protection Agency records of surrounding sites were also reviewed for additional information. The companies whose records were requested included: DAP Inc., Gem City Chemical Inc., Brainerd Industries, Hohman Plating and Manufacturing Company, Gem City Stamping, Inc., American Lubricants

Company, Ris Paper Company, Angell Manufacturing Company, and Paint America Company. Access to the following records for these facilities was requested: hazardous material spill reports, generator annual hazardous waste reports, agency site investigations, and studies relating to soil/groundwater remediation projects. Results of this research are presented in Section 3.2 of this report.

4. Additional information acquired and reviewed included copies of the soil survey prepared for Montgomery County (Soil Conservation Service), groundwater resources map (James J. Schmidt), Dayton North Quadrangle map (United States Geological Survey), State of Ohio Soil Contamination Regulations, Maximum Contaminant Levels (MCLs) standards for public water supplies and procedures established by the State of Ohio Division of Emergency and Remedial Response (DERR) in the identification of ARARs.

The findings and discussions are based solely on existing information. The overall objective of this report is to assemble available information which will be used to develop a hydrogeologic study to more fully characterize the Dayton plant site.

1.3 Report Format

Section 1 provides the purpose, methodology and format of the report. Section 2 provides a brief summary of the site's history, past and current operations, and previous site investigations that were completed such as soil gas surveys, soil borings, and remediation programs. Section 3 identifies plant activities which may have impacted the soil or groundwater. This section also includes discussions about possible off-site sources of regulated substances which may have impacted the Dayton plant and the extent of impact at these sites.

Section 4 describes the geology and hydrogeology of the immediate area as well as the region. It details the local groundwater uses and the impact of surrounding groundwater treatment systems and wellfields.

Section 5 discusses remediation objectives and the current policy at Ohio EPA concerning site investigations and remedial activities. It also includes an evaluation of what policies or regulations must be addressed before a remedial alternative is selected and implemented.

Section 6 provides an outline of the types of field investigations which would more fully characterize the site and which would delineate possible soil or groundwater contamination. It also includes a field sampling plan outline and a discussion of sampling objectives.

SECTION 2.0 - SITE DESCRIPTION

DTPP is located at 1600 Webster Street in Dayton, Ohio. The facility contains over 1.3 million square feet under roof and is located on about 60 acres. (For a site location map see Figure 1.)

The facility is immediately surrounded by the following industries: Brainerd Industries and Paint America Company on Webster Street and American Lubricants and Gem City Chemical Company on Air City Avenue. There are several other industries and commercial operations in the vicinity (DAP, Inc., Hohman Plating and Manufacturing, Gem City Stamping, Inc., Ris Paper Company, and Angell Manufacturing Company) in addition to private residences. A facility map which provides further detail of the site including buildings and other operations is included as Figure 2.

2.1 Past Site History

Past operations of the plant prior to Chrysler's acquisition in 1936 included the assembly of Maxwell cars from about 1907 - 1936. The plant historically has been used for a variety of purposes including: manufacturing furnaces, gun parts, aluminum and copper tube forming operations, light machining, plating, metal stamping, welding, soldering, degreasing, painting, plastic molding, and assembly, as well as maintenance of these processes, equipment and structures. The Maxwell building complex, which was a group of twelve former buildings, was used by Chrysler until 1990 when it was demolished. A portion of the former building footprint was replaced with a new manufacturing Building 59 in 1991. For the last 10 - 15 years prior to demolition, the Maxwell Complex was primarily used for storage purposes.

2.2 Current Plant Operations

Current operations at the facility include primarily the manufacture, assembly and finishing of heat exchangers and air conditioning components for motor vehicles. The facility consists of 8

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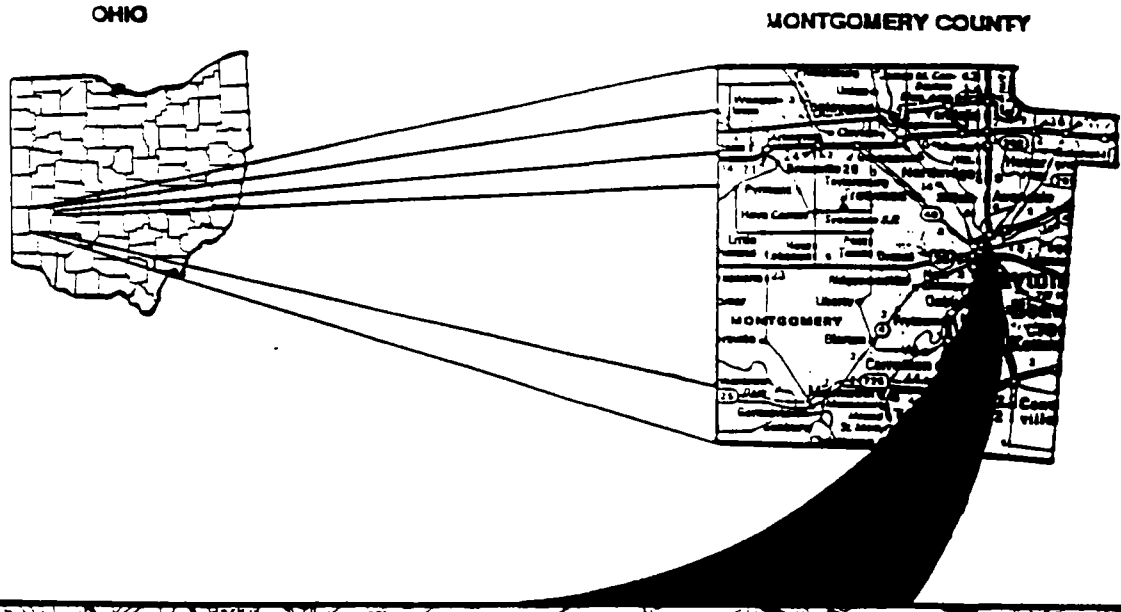
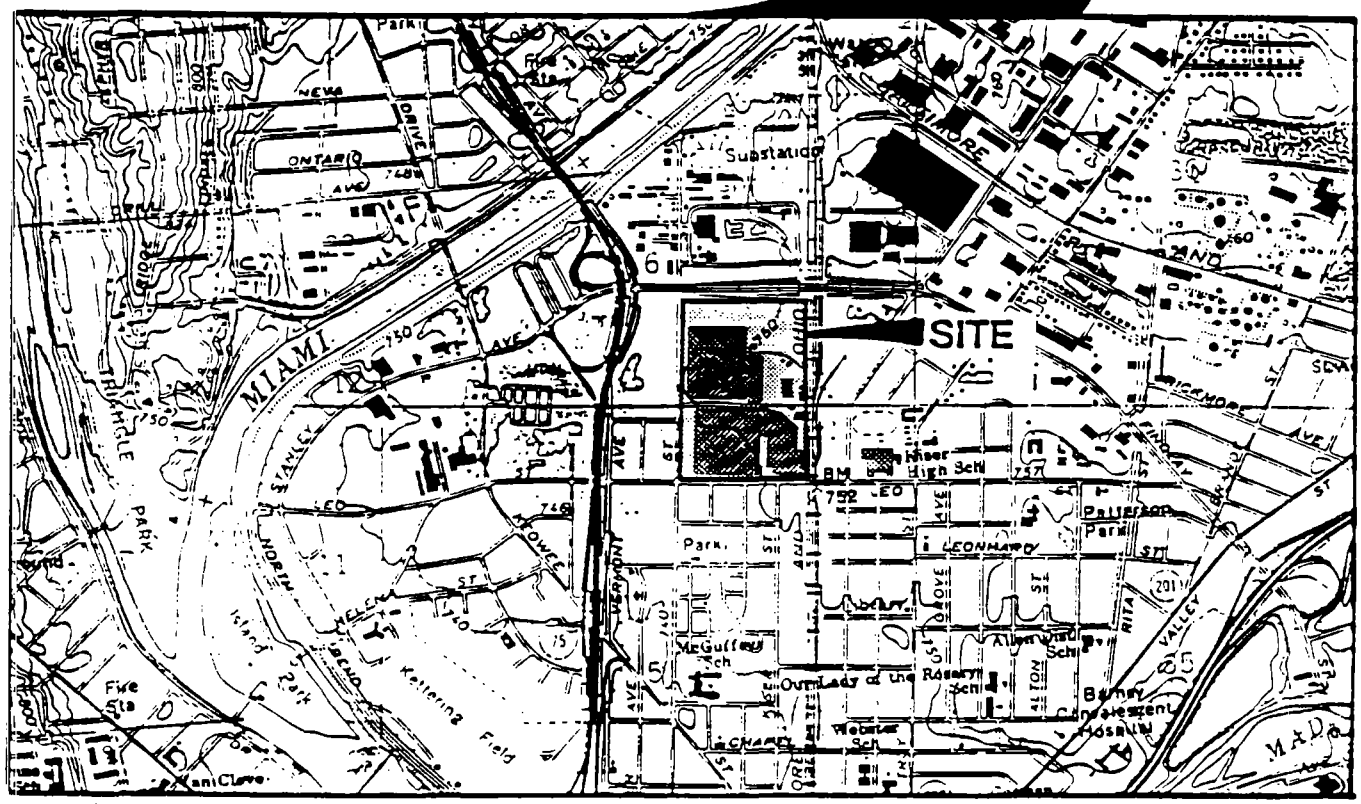
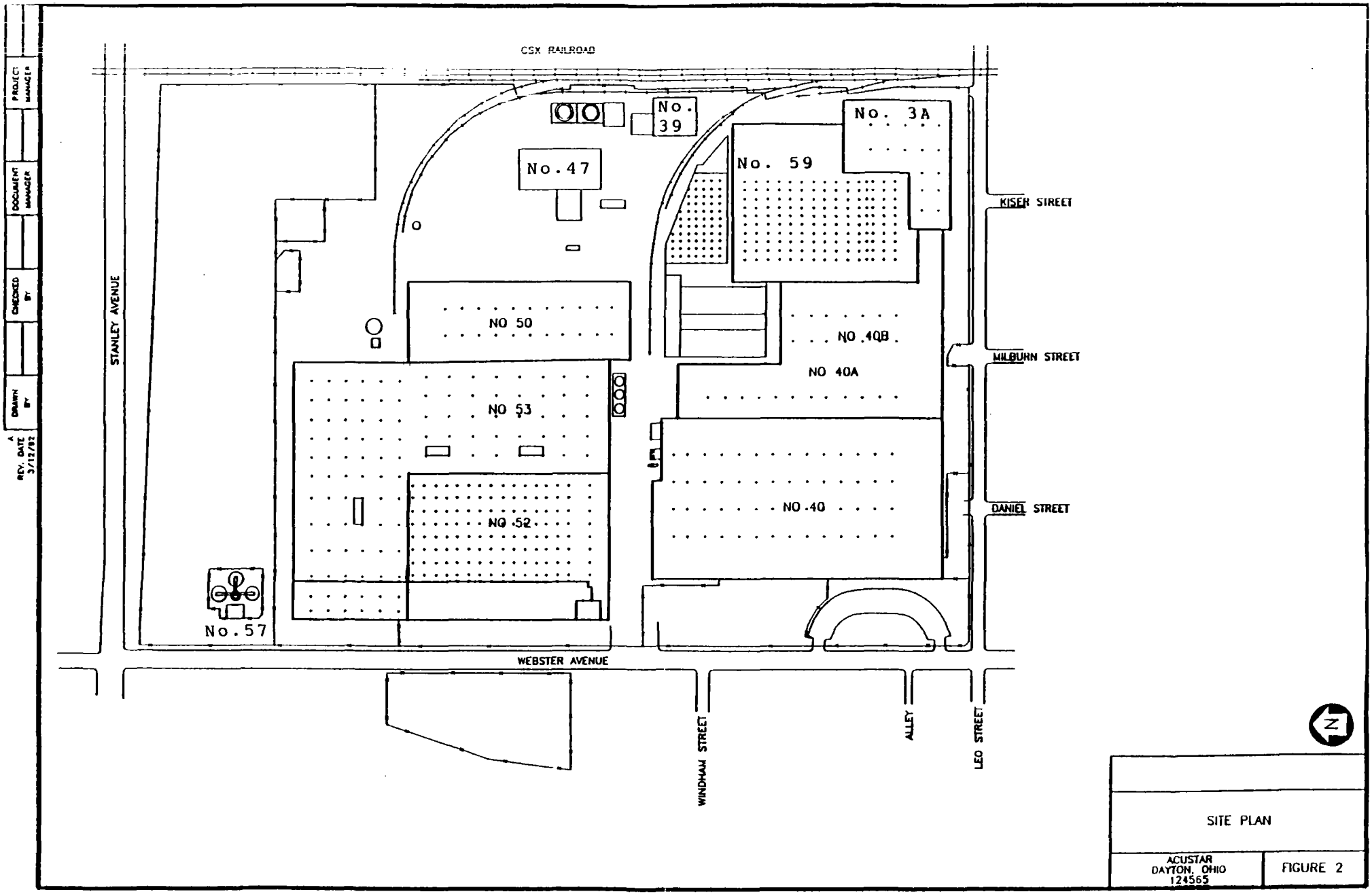




SITE LOCATION MAP

Modified from U.S.G.S Geological Survey, Dayton North, Ohio quadrangle, photo revised 1981.

ACUSTAR DAYTON, OHIO 124565	FIGURE 1



SITE PLAN

ACUSTAR
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124565

FIGURE 2

manufacturing buildings, a powerhouse, wastewater treatment plant, and incidental storage buildings.

Utilities to the site are provided as follows:

- Potable Water - Dayton Water Authority
- Sanitary Wastewater - City of Dayton (POTW)
- Boiler Make-up, Compressor and Non-Contact cooling water - On-site wells
- Process Wastewater - On-site Wastewater Treatment Plant

Surface water is collected through various swales and a stormwater piping system located throughout the facility. All run-off eventually enters the Greater Miami River via Lucille Street and Herman street storm sewer outfalls from Webster Street.

2.3 Previous Investigations

It was during the demolition of the Maxwell Complex and prior to construction of Building 59 that DTPP retained Miami Geological Services, Inc. to collect soil samples, and complete soil monitoring as excavation was on-going. The original scope of the investigation was confined to the demolition area which include Buildings 3, 4, 5, 6, 7, 8, 9, 10, 13, 34, 34A, 34B, and new Building 59 footprint area.

When the scope and complexity of environmental concerns increased during demolition, Burlington Environmental was retained to complete testing and analysis of the area around the Maxwell Complex. The field activities were quite extensive and included the evaluation of:

- Soil conditions in and around existing structures which would be removed during construction, including soils around such areas as sewer lines, pipelines, sumps, storage pads and storage areas;

- Soil conditions in areas to be excavated, including foundation areas, column piers, and adjacent paved surfaces;
- Soils remaining in-place in selected areas such as the clay soil used as part of the foundation material;
- Soil stockpiled on-site for disposal or remediation, and;
- Slabs of concrete from the demolition of the foundation of the Maxwell Complex.

The investigation of the soils during the demolition of the Maxwell Complex included:

- Test boreholes in areas which were excavated for strip foundations;
- Test boreholes in areas which were excavated for column piers;
- Soil sample testing after excavation of sewer lines, sumps, catch basins, and oil/water separators;
- Soil gas and groundwater analyses which focused on the old Maxwell Complex (new Building No. 59), several adjacent buildings (Buildings No. 40A and 40B) and several other selected locations throughout the site.

The initial scope of investigation was confined to the Maxwell Complex demolition site which became the new Building 59 footprint area. As a result of the analysis of the soils, plant personnel became aware of potential environmental impacts. Sampling was expanded to include soil gas testing in other selected areas. Testing included 167 soil gas samples, 28 groundwater headspace samples, and 23 groundwater samples. Groundwater samples were taken as part of the soil gas investigation and did not involve placement of monitoring wells. Soil gas and groundwater headspace samples were analyzed for volatile organics. Groundwater samples were retrieved through the soil gas probe and submitted for laboratory analysis for volatile organic compounds (VOCs). Figure 3, from the Mathes/Burlington soil gas investigation report, contains the sampling locations from April, 1991.

Testing focused on the Maxwell Complex area and adjacent Buildings 40A and 40B as well as other locations throughout the site as noted in Figure 3. Soil gas samples from Buildings 40A and 40B were taken at 0 - 1 foot, 3 - 4 foot, and 6 - 7 foot depths. Additional soil gas sample locations throughout the site were taken at 8 to 10 foot and 19 to 20 foot depths. Groundwater samples were generally taken at 24 - 25 foot depths and included groundwater headspace testing. Groundwater samples were taken at 29 - 30 foot depths at each of three locations noted. The test results which were not sampled and analyzed according to U.S. EPA methodologies or protocol, indicated the following compounds may be present:

Trichloroethene (TCE)

- Soil Gas Samples - Buildings 40A and 40B (0-1', 3-4', and 6-7' depths) - Concentrations at each depth appeared to be highest on the east side of Building 40B which is adjacent to Building 59. A trichloro trifluoroethane (CFC-113) degreaser station was formerly located on the east side of Building 40B at the time of sampling. However, the degreaser system was removed from service in 1991 and replaced with an aqueous washer system.

- Soil Gas Samples - Site Wide Locations (8-10' and 19-20' depths) - Highest concentrations were located in Building 40A, the east side of Building 40B, and the west side of the Maxwell Complex excavation area (adjacent to Building 40B).

- Groundwater Headspace and Groundwater Samples - Site Wide Locations (24-25' and 30-31' depths - Highest readings in the groundwater headspace samples were located in Buildings 40A, the east side of Building 40B, and the west side of the Maxwell Complex excavation area. Groundwater sample concentrations were highest on the west side of the Maxwell Complex excavation area, the west side of Building 40, at isolated outside locations south of Building 3A, east of Building 50, and south of

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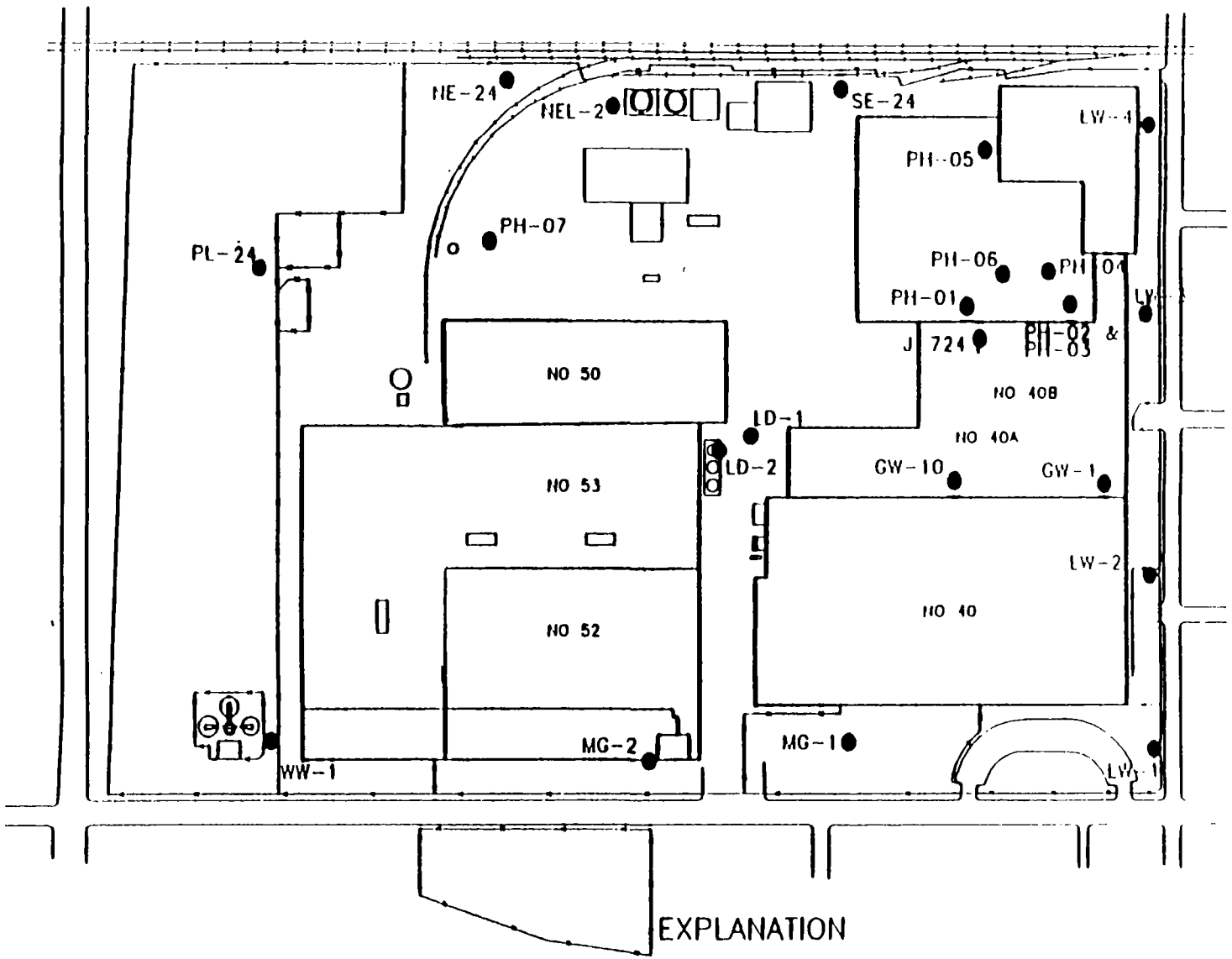

NOTE: Soil gas and groundwater headspace samples were collected from PH-02 and groundwater samples were collected from PH-03.

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SAMPLING LOCATIONS

FIGURE 3

Building 53. The area outside Building 53 is the present location of the 1,1,1-trichloroethane storage tanks which are scheduled to be taken out of service in 1994. Selected groundwater samples at 30 - 31 foot depths were consistent with 24 - 25 foot depth readings with the exception of the sample taken south of Building 40B which showed an increase in magnitude at the 24 - 25 foot depths.

1,1,1-Trichloroethane (TCA)

- Soil Gas Samples - Buildings 40A and 40B (0-1', 3-4', and 6-7' depths) - Concentrations at each depth appeared to be highest near the 1,1,1-trichloroethane degreaser station and former CFC-113 degreaser station along the east side of the building. The CFC-113 degreaser was taken out of service in 1991. The TCA degreaser is scheduled to be removed from service in the first quarter of 1994. An aqueous based washer station is scheduled to replace it.

- Soil Gas Samples - Site Wide Locations (8-10' and 19-20' depths) - Highest concentrations were found in samples taken along the western section of the Maxwell Complex, the eastern section of Building 40B (near the former location of the freon degreaser station), the western section of Building 40A, and the south end of Building 53 (the location of TCA storage tanks). The TCA storage tanks are scheduled to be taken out of service in 1994.

- Groundwater Headspace and Groundwater Samples - Site Wide Locations (24-25' depths) - Groundwater headspace and groundwater samples at 25 foot depths found relatively higher concentrations in the same locations as the soil gas samples at 8 - 10 foot and 19 - 20 foot depths. The groundwater samples taken at 30 - 31 foot depth also yielded similar results. There were other isolated locations where relatively elevated groundwater concentrations of TCA were detected.

Tetrachloroethene (PCE)

- Soil Gas Samples - Building 40A and 40B (0-1', 3-4', and 6-7' depths) - Concentrations appeared to be highest in the center section of the Buildings 40A and 40B. The Burlington site assessment reports that a former process unit consisted of a parts degreaser was located in this general vicinity but was removed from service in 1982.

- Soil Gas Samples - Site Wide Locations (8-10' and 19-20' depths) - Concentrations were highest south of Building 53 (near the TCA storage tanks), the eastern section of Building 40B (near the location of the former CFC-113 degreaser station) and the western section of Building 40A.

- Groundwater Headspace and Groundwater Samples - Selected Site Wide Locations (24-25' and 30-31' depths) - Concentrations were highest in the same locations as the soil gas samples take at 8 - 10 foot and 19 - 20 foot depths. Groundwater concentrations were also relatively higher at sample locations east of Building 50 and along the eastern boundary of the site. There were other isolated locations with elevated groundwater concentrations of PCE.

1,1-Dichloroethene

- Soil Gas Samples - Buildings 40A and 40B (0-1', 3-4', and 6-7' depths) - Concentrations appeared to be relatively higher in the eastern section of Building 40B. However, at depths below 3 - 4 feet, concentrations were elevated along the west side of Building 40A. Burlington noted a possible problem with the identification and reliable measurement of 1,1-dichloroethene due to lab instrumentation/calibration problems.

- Soil Gas Samples - Site Wide Locations (8-10' and 19-20' depths) - Concentrations were relatively higher along the western section of the Maxwell Complex, the eastern section of Building 40B (near the former CFC-113 degreaser), and the western section of Building 40A.

- Groundwater Headspace and Groundwater Samples - Site Wide Locations (24-25' and 30-31' depths) - Groundwater headspace concentrations were relatively higher at the same locations as the soil gas samples taken at 8 - 10 foot and 19 - 20 foot depths and south of Building 53. Groundwater sample concentrations were elevated at locations south of Building 53 (in the general vicinity of the TCA storage tanks scheduled to be removed from service in 1994). The Soil Gas Investigation report noted the discrepancy of high concentrations of 1,1-dichloroethene observed by laboratory results but not observed during field testing.

cis-1,2-Dichloroethene

- Soil Gas Samples - Buildings 40A and 40B (0-1', 3-4', and 6-7' depths) - Concentrations appeared to be relatively higher along the east side of Building 40B (near the location of the former CFC-113 degreaser station) and center of the building (in the general vicinity of the parts degreaser taken out of service in 1982).

- Soil Gas Samples - Site Wide Locations (8-10' and 19-20' depths) - Concentrations were relatively higher along the western section of the Maxwell Complex, the east section of Building 40B, and east of Building 50.

- Groundwater Headspace and Groundwater Samples - Site Wide Locations (24-25' and 30-31' depths) - Groundwater headspace concentrations were relatively higher at the

same locations as soil gas samples taken at 8 to 10 foot and 19 to 20 foot depths. Groundwater samples were non-detect.

trans-1,2-Dichloroethene

- Soil Gas Samples - Buildings 40A and 40B (0-1', 3-4', and 6-7' depths) - Soil gas samples were non-detect.

- Soil Gas Samples - Site Wide Locations (8-10' and 19-20' depths) - Samples were not taken.

- Groundwater Headspace and Groundwater Samples - Site Wide Locations (24-25' and 30-31' depths) - Groundwater samples results were relatively higher in the western section of the Maxwell Complex.

1,1,2-Trichloroethane (Groundwater samples only): Sample results were relatively high in the western section of the former Maxwell Complex. Concentrations were much lower in the Maxwell Complex, south of Building 53, and in the southeast property corner.

1,1-Dichloroethane (Groundwater samples only): Groundwater sample results were relatively higher in the western section of the Maxwell Complex, south of Building 53 (current location of TCA tanks), and along the southeast corner of the property.

1,2-Dichloroethane (Groundwater samples only): Groundwater sample results were relatively higher in the western section of the Maxwell Complex, and south of Building 53 (near the current location of the TCA storage tanks).

In summary, solvents were found in the soil under Buildings 40A and 40B, the south western portion of the former Maxwell Complex, in the storage area east of Building 50, and south of Building 53 near the TCA tanks.

2.4 Soil Remediation Program

As a result of the investigation, four stock piles were created with the soil removed from the footprint of Building 59. The soils were treated as follows:

- A stockpile of clean soil was relocated to a parking lot in the northeast portion of the property.
- A stockpile was constructed north of Building 47 to treat soil primarily impacted with total petroleum hydrocarbons (TPH).
- Another stockpile was located in the same vicinity of soils that were primarily impacted by volatile organics (VOCs).
- Another stockpile was located southeast of the petroleum pile of soil which was impacted by a variety of compounds.

The VOC and TPH piles were treated by vacuum extraction. Two blowers were installed in each pile and were connected by manifolds to the piping at the base of the bed. The VOC pile was cleaned by this process. The TPH soils have since been combined with the unknown pile and are now undergoing biotreatment.

SECTION 3.0 - POTENTIAL ENVIRONMENTAL IMPACTS

This section of the report will summarize the potential on-site sources identified in the Burlington report (Environmental Site Assessment - March, 1992) and provide an update on the status of these sources. In addition, various potential off-site sources were evaluated and our findings are presented herein.

3.1 On-Site Potential Sources

The various activities at the plant which may have impacted the soil or groundwater were reviewed. These sources include: underground and above ground storage tanks, chemical storage areas, hazardous waste accumulation storage areas, sumps for waste oil or process wastewater, past spills, and various processes or operations of the plant. These potential on-site sources of contamination were identified in the above referenced report prepared by Mathes/Burlington (see Figure 4). In summary the following was identified:

- There were 36 above ground storage tanks noted in the report. The tanks store a variety of materials including: fuels, acids, polymers, oils, and solvents. The tanks which store TCA and its sludge are located on the south side of Building 53 and the north side of Building 40.
- There were 6 underground storage tanks (USTs) on-site, 3 gasoline and 3 fuel oil. Of these, 1 gasoline and 2 fuel oil USTs were properly abandoned. The 2 remaining gasoline USTs were removed in July, 1993 under State supervision and the area surrounding the tanks was declared clean. The other fuel oil tank was accidentally discovered during excavation activities associated with the Maxwell Complex demolition. This 500 gallon tank was subsequently removed by Mathes/Burlington and surrounding soils were treated to ensure the soil was clean. There is no knowledge of any remaining USTs on the DTPP site.
- There are 4 hazardous waste streams generated by the plant. They are:

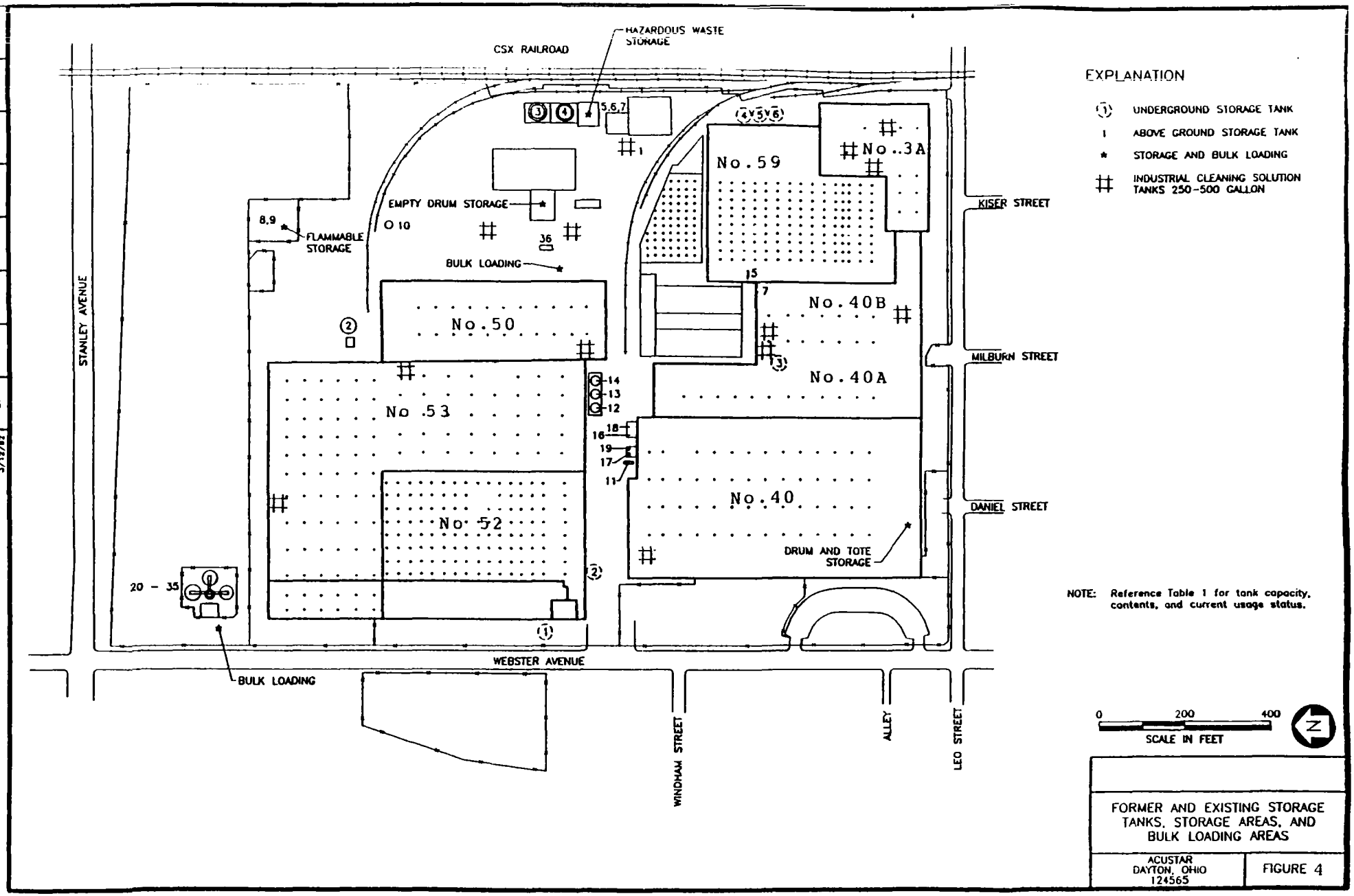
CSX RAILROAD
HAZARDOUS WASTE STORAGE
STANLEY AVENUE
KISER STREET
MILBURN STREET
DANIEL STREET
WEBSTER AVENUE
WINDHAM STREET
ALLEY
LEO STREET
EMPTY DRUM STORAGE
FLAMMABLE STORAGE
BULK LOADING
BULK LOADING
DRUM AND TOTE STORAGE
No. 59
No. 3A
No. 40B
No. 40A
No. 50
No. 53
No. 52
No. 40
EXPLANATION
UNDERGROUND STORAGE TANK
ABOVE GROUND STORAGE TANK
STORAGE AND BULK LOADING
INDUSTRIAL CLEANING SOLUTION TANKS 250-500 GALLON
NOTE: Reference Table 1 for tank capacity, contents, and current usage status.
0
200
400
SCALE IN FEET
N
FORMER AND EXISTING STORAGE TANKS, STORAGE AREAS, AND BULK LOADING AREAS
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FIGURE 4
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1. The combined degreaser sludges from the CFC-113 and TCA operations.
2. Maintenance-derived paint waste containing isopropyl alcohol.
3. Waste water treatment plant sludge.
4. Magnesium-containing waste.

(See Figure 5 for hazardous waste generation and accumulation areas.)

- An in-house program is underway to reline and/or recoat the sumps. A majority are now complete. Sumps are now being capped.
- Process areas were also investigated. Figure 7 of the Burlington report identifies those areas that contain processes of concern. A listing of process areas of concern in the Burlington report has been updated since DTPP has undertaken a program to remove and replace those processes using regulated substances. There are currently three chlorinated solvent degreasers in the plant, two in the production area and one small unit in a lab. A TCA degreaser is located in the NE area of Building 40A and is scheduled for replacement with an aqueous washer and removal in early 1994. A CFC-113 degreaser is located in the middle of Building 40A and is scheduled for replacement in mid-1994 and will be replaced by a vacuum de-oiling system. A small CFC-113 engineering laboratory degreaser will be replaced and removed as soon as a suitable alternative can be found.
- Clean Tech reviewed spill records maintained by DTPP from mid-1988 through mid-1993. The records included internal documentation on spills that required notification of State and Federal agencies. Of the 36 spill records reviewed, 25 percent were attributed to machine or hydraulic oil products. Locations included the area south of the non-hazardous storage area, and Buildings 6, 39A, 3A, 53, and the former Maxwell Complex. Quantities released did not typically exceed fifty gallons and ranged from 0.5 - 300 gallons. These surface spills typically involved waste oil sumps and/or the storm sewer system. Spills included:

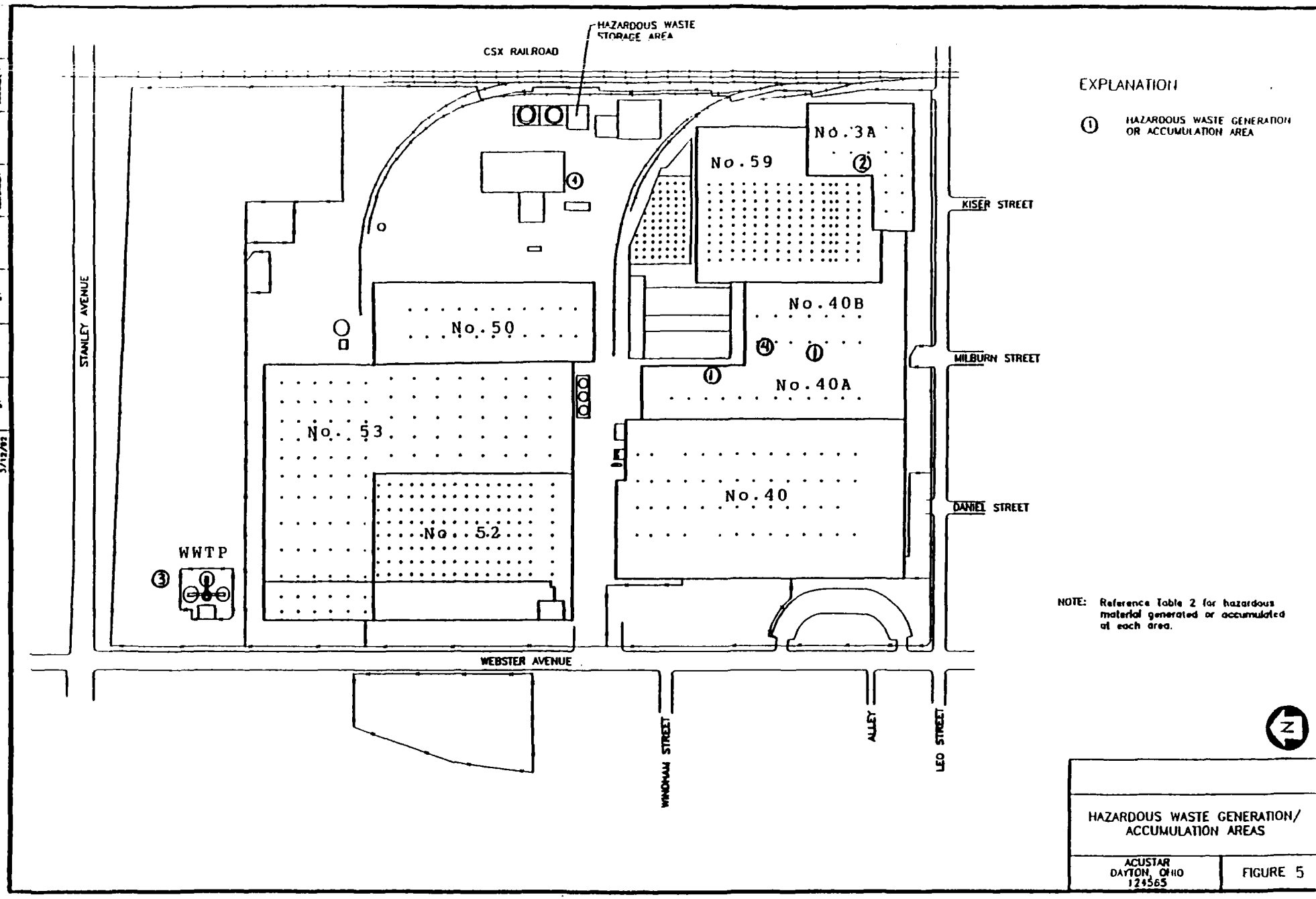
HAZARDOUS WASTE STORAGE AREA
CSX RAILROAD
STANLEY AVENUE
No. 3A
No. 59
KISER STREET
No. 40B
No. 50
MILBURN STREET
No. 40A
No. 53
No. 40
No. 52
DANIEL STREET
WWTP
WEBSTER AVENUE
WINDHAM STREET
ALLEY
LEO STREET
EXPLANATION
① HAZARDOUS WASTE GENERATION OR ACCUMULATION AREA
NOTE: Reference Table 2 for hazardous material generated or accumulated at each area.
HAZARDOUS WASTE GENERATION/ ACCUMULATION AREAS
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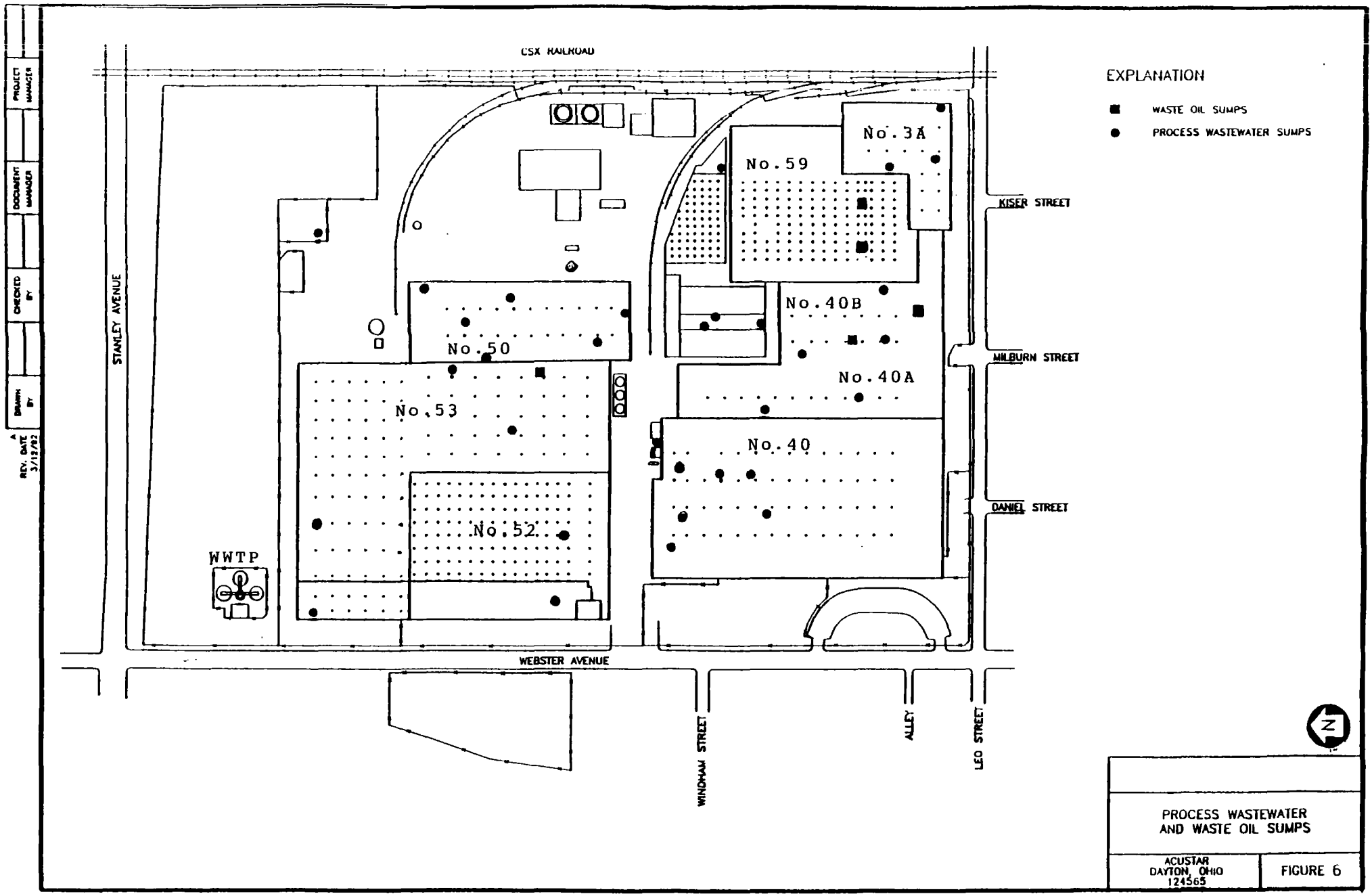
FIGURE 5



PROCESS WASTEWATER AND WASTE OIL SUMPS

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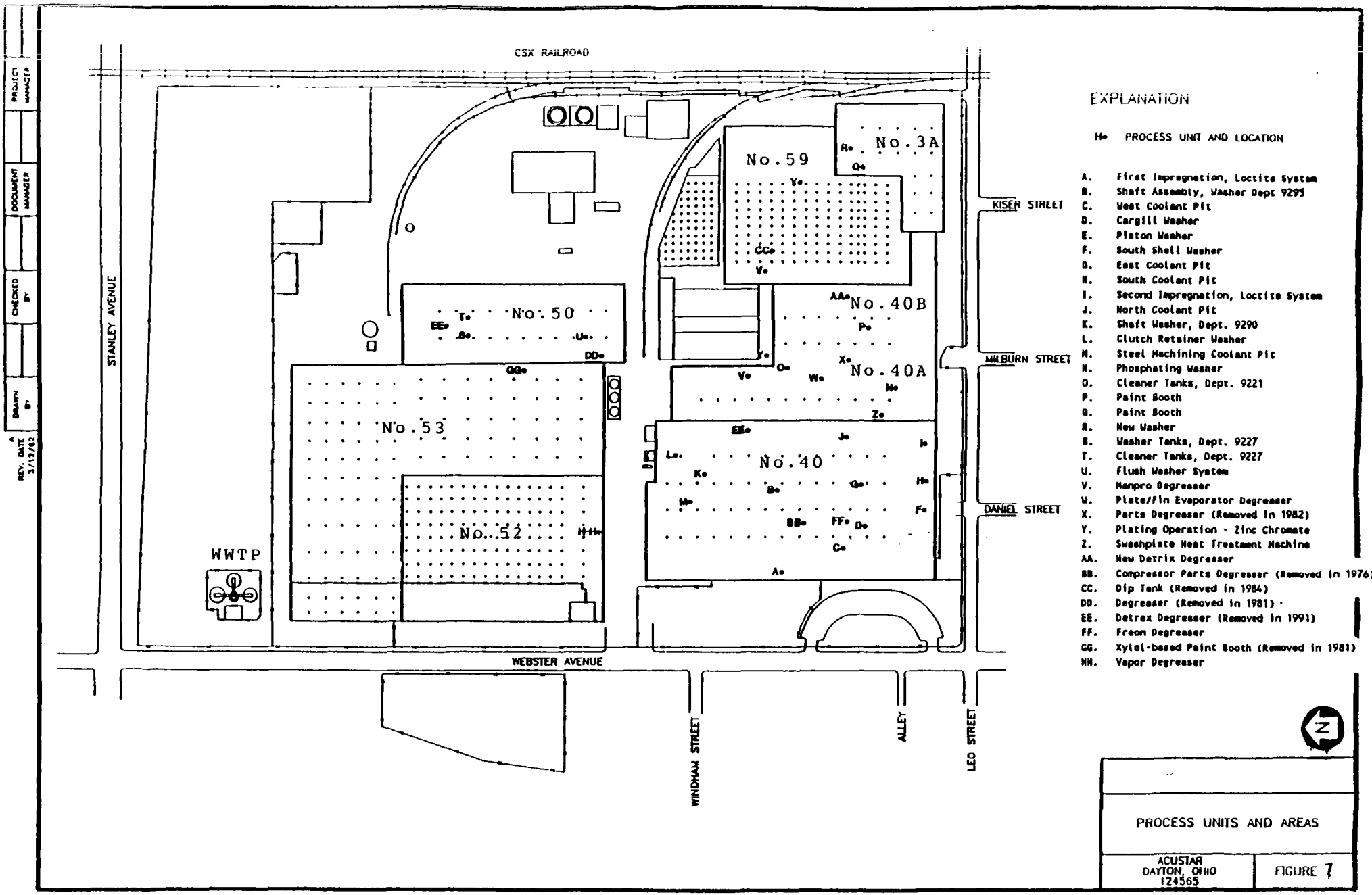
FIGURE 6



EXPLANATION

He PROCESS UNIT AND LOCATION

- A. First Impregnation, Loctite System
- B. Shaft Assembly, Washer Dept 9295
- C. West Coolant Pit
- D. Cargill Washer
- E. Piston Washer
- F. South Shell Washer
- G. East Coolant Pit
- H. South Coolant Pit
- I. Second Impregnation, Loctite System
- J. North Coolant Pit
- K. Shaft Washer, Dept. 9290
- L. Clutch Retainer Washer
- M. Steel Machining Coolant Pit
- N. Phosphating Washer
- O. Cleaner Tanks, Dept. 9221
- P. Paint Booth
- Q. Paint Booth
- R. New Washer
- S. Washer Tanks, Dept. 9227
- T. Cleaner Tanks, Dept. 9227
- U. Flush Washer System
- V. Manpro Degreaser
- W. Plate/Fin Evaporator Degreaser
- X. Parts Degreaser (Removed in 1982)
- Y. Plating Operation - Zinc Chromate
- Z. Sweshplate Heat Treatment Machine
- AA. New Detrix Degreaser
- BB. Compressor Parts Degreaser (Removed in 1976)
- CC. Dip Tank (Removed in 1984)
- DD. Degreaser (Removed in 1981)
- EE. Detrex Degreaser (Removed in 1991)
- FF. Freon Degreaser
- GG. Xylol-based Paint Booth (Removed in 1981)
- HH. Vapor Degreaser

N

PROCESS UNITS AND AREAS

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FIGURE 7